PB-240 348

# CAYUGA LAKE, CAYUGA, SENECA, AND TOMPKINS COUNTIES, NEW YORK

Pacific Northwest Environmental
Research Laboratory

Prepared for:

National Environmental Research Center
New York State Department of Environmental
Conservation
New York National Guard

December 1974

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16. ABSTRACT
Annual total phosphorus and total nitrogen loadings tc the lake were estimated and subdivded according to either point or non-point source origin. An assessment of the lake's trophic condition and limiting nutrient is also provided. All data collected by the U.S.E.P.A. National Eutrophication Survey during the one year study of the lake and its tributaries are included in the report.

17. KEY WORDS AND DOCUMENT ANALYSIS

| a. DESCRIPTORS | b. IDENTIFIERS/OPEN ENDED TERMS | c. COSATI Field/Group |
|---|---|---|
| eutrophication<br>lakes<br>nutrients<br>phosphorus<br>nitrogen<br>loading | | 05B<br>05C |

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REPORT

ON

CAYUGA LAKE,

CAYUGA, SENECA, AND TOMPKINS COUNTIES,

NEW YORK

EPA REGION II

WORKING PAPER No. 153

WITH THE COOPERATION OF THE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

AND THE

NEW YORK NATIONAL GUARD

DECEMBER, 1974

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# FOREWORD

The National Eutrophication Survey was initiated in 1972 in response to an Administration commitment to investigate the nationwide threat of accelerated eutrophication to fresh water lakes and reservoirs.

## OBJECTIVES

The Survey was designed to develop, in conjunction with state environmental agencies, information on nutrient sources, concentrations, and impact on selected freshwater lakes as a basis for formulating comprehensive and coordinated national, regional, and state management practices relating to point-source discharge reduction and non-point source pollution abatement in lake watersheds.

## ANALYTIC APPROACH

The mathematical and statistical procedures selected for the Survey's eutrophication analysis are based on related concepts that:

a. A generalized representation or model relating sources, concentrations, and impacts can be constructed.

b. By applying measurements of relevant parameters associated with lake degradation, the generalized model can be transformed into an operational representation of a lake, its drainage basin, and related nutrients.

c. With such a transformation, an assessment of the potential for eutrophication control can be made.

## LAKE ANALYSIS

In this report, the first stage of evaluation of lake and watershed data collected from the study lake and its drainage basin is documented. The report is formatted to provide state environmental agencies with specific information for basin planning [§303(e)], water quality criteria/standards review [§303(c)], clean lakes [§314(a,b)], and water quality monitoring [§106 and §305(b)] activities mandated by the Federal Water Pollution Control Act Amendments of 1972.

Beyond the single lake analysis, broader based correlations between nutrient concentrations (and loading) and trophic condition are being made to advance the rationale and data base for refinement of nutrient water quality criteria for the Nation's fresh water lakes. Likewise, multivariate evaluations for the relationships between land use, nutrient export, and trophic condition, by lake class or use, are being developed to assist in the formulation of planning guidelines and policies by EPA and to augment plans implementation by the states.

ACKNOWLEDGMENT

The staff of the National Eutrophication Survey (Office of Research & Development, U. S. Environmental Protection Agency) expresses sincere appreciation to the New York Department of Environmental Conservation for professional involvement and to the New York National Guard for conducting the tributary sampling phase of the Survey.

Henry L. Diamond, Commissioner of the New York Department of Environmental Conservation, and Leo J. Hetling, Director, and Italo G. Carcich, Senior Sanitary Engineer, Environmental Quality Research, Department of Environmental Conservation, provided invaluable lake documentation and counsel during the Survey.

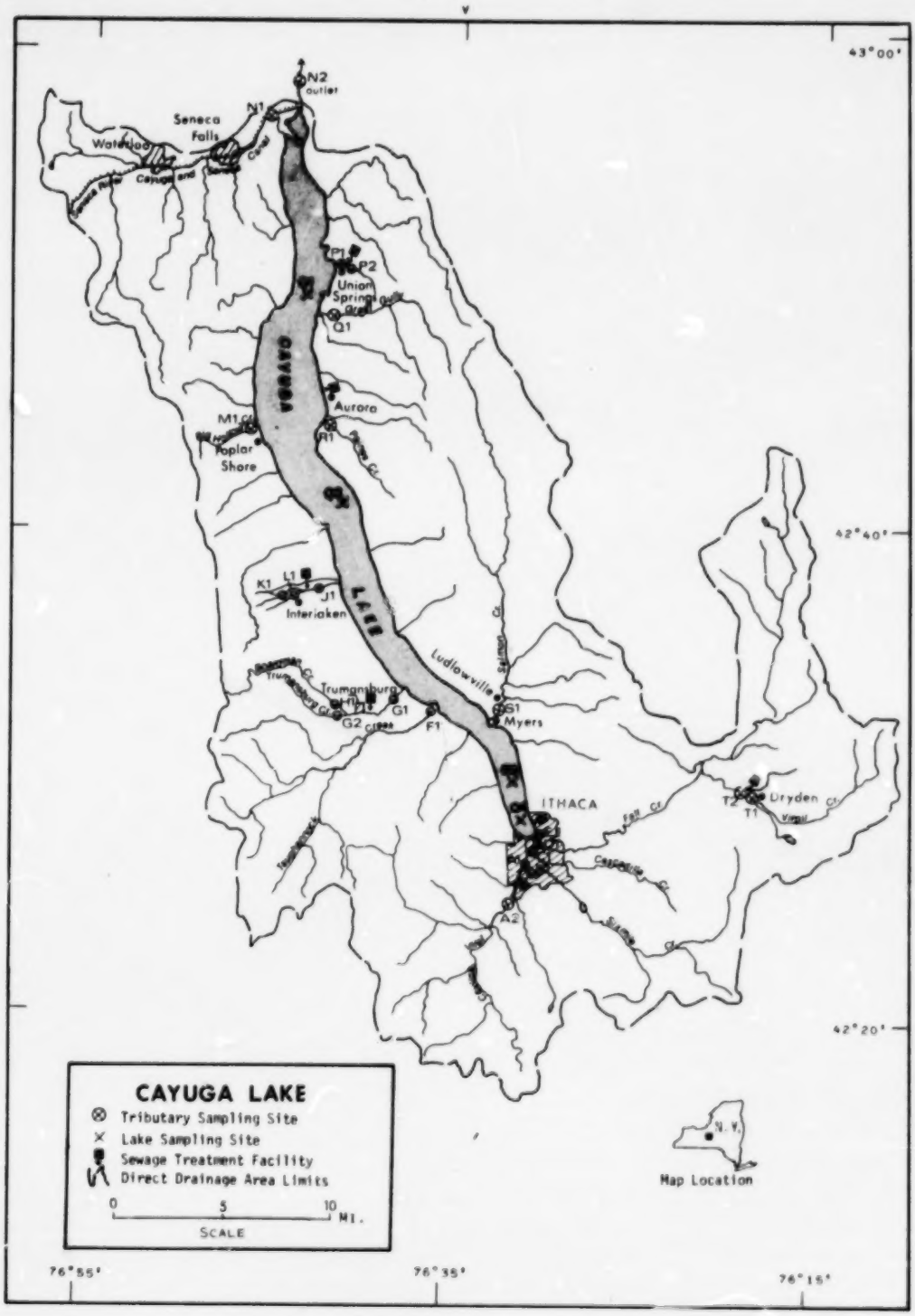
Major General John C. Baker, the Adjutant General of New York, and Project Officer Lieutenant Colonel Fred Peters, who directed the volunteer efforts of the New York National Guardsmen, are also gratefully acknowledged for their assistance to the Survey.

NATIONAL EUTROPHICATION SURVEY

STUDY LAKES

STATE OF NEW YORK

| LAKE NAME | COUNTY |
|---|---|
| Allegheny Reservoir | Cattaraugas, NY; McLean, Warren, PA |
| Black | St. Lawrence |
| Canadaigua | Ontario |
| Cannonsville | Delaware |
| Carry Falls | St. Lawrence |
| Cassadaga | Chautauqua |
| Cayuga | Seneca, Tompkins |
| Champlain | Clinton, Essex, NY; Addison, Chittenden, Franklin, VT |
| Chautauqua | Chautauqua |
| Conesus | Livingston |
| Cross | Cayuga, Onondaga |
| Goodyear | Otsego |
| Huntington | Sullivan |
| Keuka | Ontario |
| Long | Hamilton |
| Lower St. Regis | Franklin |
| Otter | Cayuga |
| Owasco | Cayuga |
| Raquette Pond | Franklin |
| Round | Saratoga |
| Sacandaga Res. | Fulton, Saratoga |
| Saratoga | Saratoga |
| Schroon | Essex, Warren |
| Seneca | Seneca, Schyler, Yates |
| Swan | Sullivan |
| Swinging Bridge Res. | Sullivan |


43°00'
42°40'
42°20'
76°55'
76°35'
76°15'
N2
outlet
N1
Seneca Falls
Waterloo
Seneca River
Cayuga and Seneca Canal
P1
P2
Union Springs
Q1
CAYUGA
Aurora
M1
Poplar Shore
R1
Cayuga Cr.
K1
L1
J1
Interlaken
LAKE
Ludlowville
Salmon Cr.
Trumansburg Cr.
Trumansburg
Z1
G1
G2
F1
S1
Myers
ITHACA
Fall Cr.
Cayuga Inlet
Taughannock Cr.
A2
Sheldrake
Salmon Cr.
Dryden
T2
T1
Virgil Cr.
N. Y.
Map Location
CAYUGA LAKE
Tributary Sampling Site
Lake Sampling Site
Sewage Treatment Facility
Direct Drainage Area Limits
0
5
10
MI.
SCALE

# CAYUGA LAKE

## STORET NO. 3608

## I. CONCLUSIONS

### A. Trophic Condition:

Cayuga Lake is in very good trophic condition now and, from an overall standpoint, probably should be classified as oligo-mesotrophic. During periods of stratification, the dissolved oxygen concentrations in the hypolimnion do not decrease with depth, as is typical of oligotrophic lakes, but at times chlorophyll a concentrations were within a range that would be considered mesotrophic. Mean chlorophyll a levels were exceeded by 22 of the other 25 New York lakes on which sampling was completed.

Secchi disc transparency was also within a range which would be considered mesotrophic. Cayuga Lake had greater Secchi disc transparency than 17 of the other lakes.

The algal assay control yield indicated primary productivity in the oligotrophic or slightly mesotrophic range. The Cayuga Lake control yield was exceeded by 80% of the other surveyed New York lakes.

The blue-green alga genus, Anabaena, which in large numbers is indicative of a eutrophic condition, was present during the fall sampling but in low numbers.

B. Rate-Limiting Nutrient:

The algal assay results, the lake chemistry, and data of others (Oglesby, 1974) all indicate that Cayuga Lake is phosphorus limited.

C. Nutrient Sources--Controllability:

According to the hypothesis set forth by Vollenweider (in press), Cayuga Lake receives an annual phosphorus load which should result in a eutrophic lake condition; however, the lake is now oligo-mesotrophic. There are several explanations as to why the lake is not in a more advanced trophic state, most of which involve the long retention time and assimilative capacity due to great depth and the volume of the hypolimnion.

In any event, Cayuga Lake now receives a substantial phosphorus load from point sources which could be controlled. The significant point and non-point inputs are summarized as follows:

1. Point sources--Six known municipal sewage treatment plants impact Cayuga Lake and collectively contribute 45.8% of the total annual phosphorus load. Ithaca and Cayuga Heights are the largest contributors with 30.2% and 4.2%, respectively. Only 12.7% of the total nitrogen input originates from the six treatment plants.

2. Non-point sources--The 13 sampled tributaries account for 44.6% of the total annual phosphorus load to the lake, while

non-point source runoff from unsampled tributaries and immediate drainage accounted for an additional 7.3%. Of the sampled tributaries, Fall Creek contributed 16.2% of the total phosphorus input to Cayuga Lake during the sampling year.

Phosphorus exports per square mile of drainage area were exceptionally high for Fall Creek, Cascadilla Creek and Pleasant Grove Brook (all of which flow through the Ithaca metropolitan area) as well as for Trumansburg Creek further down the lake. The high exports of the first three streams could be due to city storm drainage or unidentified point-source discharges. The high exports of Trumansburg Creek may be due to underestimation of the loads from the Village of Trumansburg.

Sampled tributaries contributed 54.2% of the total nitrogen input to Cayuga Lake on an annual basis. Of the sampled tributaries, Fall Creek and Salmon Creek were the largest contributors.

## II. LAKE AND DRAINAGE BASIN CHARACTERISTICS

### A. Lake Morphometry†:

1. Surface area: 42,496 acres.
2. Mean depth: 178.8 feet.
3. Maximum depth: 435 feet.
4. Volume: 7,600,551 acre/feet.
5. Mean hydraulic retention time: 11.2 years.

### B. Tributary and Outlet:
(See Appendix A for flow data)

1. Tributaries -

| Name | Drainage area* | Mean flow* |
|---|---|---|
| Cayuaga Inlet | 94.7 $mi^2$ | 96.0 cfs |
| Sixmile Creek | 49.6 $mi^2$ | 49.2 cfs |
| Cascadilla Creek | 13.7 $mi^2$ | 17.4 cfs |
| Fall Creek | 128.0 $mi^2$ | 179.8 cfs |
| Pleasant Grove Brook | 0.7 $mi^2$ | 1.0 cfs |
| Taughannock Creek | 67.0 $mi^2$ | 79.9 cfs |
| Trumansburg Creek | 13.5 $mi^2$ | 14.4 cfs |
| Unnamed stream (J-1) | 1.9 $mi^2$ | 0.8 cfs |
| Big Hollow Creek | 2.3 $mi^2$ | 1.0 cfs |
| Unnamed stream (P-1) | 2.5 $mi^2$ | 2.7 cfs |
| Great Gully Creek | 15.0 $mi^2$ | 15.9 cfs |
| Paines Creek | 15.4 $mi^2$ | 7.0 cfs |
| Salmon Creek | 89.2 $mi^2$ | 109.3 cfs |
| Minor tributaries & immediate drainage - | 225.1 $mi^2$ | 358.9 cfs |
| Total | 718.6 $mi^2$ | 933.3 cfs |

2. Outlet -

| | | |
|---|---|---|
| Seneca River | 785.0 $mi^2$** | 933.3 cfs** |

† Henson, Bradshaw, and Chandler, 1961.
* Drainage areas are accurate within ±5%, except for small basins (±10%); mean daily flows are accurate within ±5 to 25%; and normalized mean monthly flows are accurate within ±15%.
** Exclusive of Cayuga-Seneca Canal system; area includes that of the lake.

C. Precipitation*:

1. Year of sampling: 32.8 inches.

2. Mean annual: 31.6 inches.

* See Working Paper No. 1, "Survey Methods".

## III. LAKE WATER QUALITY SUMMARY

Cayuga Lake was sampled three times during the open-water season of 1972 by means of a pontoon-equipped Huey helicopter. Each time, samples for physical and chemical parameters were collected from four stations of the lake and from a number of depths at each station (see map, page v). During each visit a single depth-integrated (15 feet or near bottom to surface) sample was composited from the four stations for phytoplankton identification and enumeration; and during the last visit, a single five-gallon depth-integrated sample was composited for algal assays. Also each time, depth-integrated samples were collected from each of the stations for chlorophyll a analysis. The maximum depths sampled were 69 feet at station 1, 337 feet at station 2, 283 feet at station 3, and 18 feet at station 4.

The results obtained are presented in full in Appendix B, and the data for the fall sampling period, when the lake essentially was well-mixed, are summarized below. Note, however, the Secchi disc summary is based on all values.

For differences in the various parameters at the other sampling times, refer to Appendix B.

A. Physical and chemical characteristics:

| Parameter | Minimum | Mean | Median | Maximum |
|---|---|---|---|---|
| | | FALL VALUES | | |
| Temperature (Cent.) | 4.6 | 11.0 | 12.5 | 13.3 |
| Dissolved oxygen (mg/l) | 8.8 | 10.1 | 10.1 | 10.6 |
| Conductivity (μmhos) | 475 | 496 | 500 | 520 |
| pH (units) | 7.8 | 8.1 | 8.1 | 8.3 |
| Alkalinity (mg/l) | 88 | 103 | 105 | 111 |
| Total P (mg/l) | 0.006 | 0.011 | 0.009 | 0.039 |
| Dissolved P (mg/l) | 0.002 | 0.007 | 0.006 | 0.016 |
| $NO_2$ + $NO_3$ (mg/l) | 0.380 | 0.722 | 0.740 | 0.850 |
| Ammonia (mg/l) | 0.020 | 0.037 | 0.040 | 0.050 |
| | | ALL VALUES | | |
| Secchi disc (inches) | 51 | 112 | 77 | 200 |

B. Biological characteristics:

1. Phytoplankton -

| Sampling Date | Dominant Genera | Number per ml |
|---|---|---|
| 05/16/72 | 1. Oocystis | 2,767 |
| | 2. Cyclotella | 669 |
| | 3. Chroococcus | 633 |
| | 4. Dinobryon | 615 |
| | 5. Synedra | 398 |
| | Other genera | 686 |
| | Total | 5,768 |
| 07/23/72 | 1. Dinobryon | 1,320 |
| | 2. Fragilaria | 542 |
| | 3. Cyclotella | 488 |
| | 4. Cryptomonas | 325 |
| | 5. Melosira | 289 |
| | Other genera | 1,105 |
| | Total | 4,069 |
| 10/13/72 | 1. Flagellates | 627 |
| | 2. Dinobryon | 187 |
| | 3. Anabaena | 151 |
| | 4. Cryptomonas | 145 |
| | 5. Cyclotella | 78 |
| | Other genera | 446 |
| | Total | 1,634 |

2. Chlorophyll *a* -
(Because of instrumentation problems during the 1972 sampling, the following values may be in error by plus or minus 20 percent.)

| Sampling Date | Station Number | Chlorophyll *a* (µg/l) |
|---|---|---|
| 05/16/72 | 01 | 0.1 |
| | 02 | 0.1 |
| | 03 | 0.3 |
| | 04 | - |
| 07/23/72 | 01 | 5.7 |
| | 02 | 3.5 |
| | 03 | 10.0 |
| | 04 | 5.3 |
| 10/13/72 | 01 | 2.4 |
| | 02 | 2.4 |
| | 03 | 3.7 |
| | 04 | 2.1 |

C. Limiting Nutrient Study:

1. Autoclaved, filtered, and nutrient spiked -

| Spike (mg/l) | Ortho P Conc. (mg/l) | Inorganic N Conc. (mg/l) | Maximum yield (mg/l-dry wt.) |
|---|---|---|---|
| Control | 0.004 | 0.769 | 0.1 |
| 0.010 P | 0.014 | 0.769 | 1.4 |
| 0.020 P | 0.024 | 0.769 | 5.8 |
| 0.050 P | 0.054 | 0.769 | 15.6 |
| 0.050 P + 1.0 N | 0.054 | 1.769 | 13.3 |
| 1.0 N | 0.004 | 1.769 | 0.1 |

2. Filtered and nutrient spiked -

| Spike (mg/l) | Ortho P Conc. (mg/l) | Inorganic N Conc. (mg/l) | Maximum yield (mg/l-dry wt.) |
|---|---|---|---|
| Control | 0.003 | 0.736 | 0.1 |
| 0.010 P | 0.013 | 0.736 | 2.5 |
| 0.020 P | 0.023 | 0.736 | 7.7 |
| 0.050 P | 0.053 | 0.736 | 17.6 |
| 0.050 P + 1.0 N | 0.053 | 1.736 | 17.6 |
| 1.0 N | 0.003 | 1.736 | 0.1 |

3. Discussion -

The control yields of the assay alga, Selenastrum capricornutum, indicate that the primary productivity of Cayuga Lake was very low at the time the fall sample was collected and corresponded to an oligotrophic or mesotrophic condition.

The increased yields with increased levels of orthophosphorus, and the lack of response when only nitrogen was added, show that the lake was phosphorus limited. The lake data indicate phosphorus limitation at all sampling times; mean N/P ratios were 60/1 or greater, and phosphorus limitation would be expected.

The fact that Cayuga Lake is phosphorus limited has also been cited by Oglesby (1974).

## IV. NUTRIENT LOADINGS
(See Appendix C for data)

For the determination of nutrient loadings, the New York National Guard collected monthly near-surface grab samples from each of the tributary sites indicated on the map (page v), except for the high runoff months of April and May when two samples were collected. Sampling was begun in November, 1972, and was completed in October, 1973.

Through an interagency agreement, stream flow estimates for the year of sampling and a "normalized" or average year were provided by the New York District Office of the U.S. Geological Survey for the tributary sites nearest the lake.

In this report, nutrient loads for sampled tributaries were determined by using a modification of a U.S. Geological Survey computer program for calculating stream loadings*. Nutrient loadings for unsampled "minor tributaries and immediate drainage" ("ZZ" of U.S.G.S.) were estimated by using the means of the nutrient loads, in $lbs/mi^2/year$, at stations B-1, F-1, J-1, M-1, and Q-1 and multiplying the means by the ZZ area in $mi^2$.

The operators of the Ithaca and Interlaken wastewater treatment plants provided monthly effluent samples and corresponding flow data. However, too few samples were received from Cayuga Heights; and Aurora, Dryden, Trumansburg, and Union Springs did not participate in the Survey. Nutrient loads from the latter treatment plants were estimated at 2.5 lbs P and 7.5 lbs N/capita/year.

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* See Working Paper No. 1.

A. Waste Sources:

1. Known municipal -

| Name | Pop. Served† | Treatment | Mean Flow (mgd) | Receiving Water |
|---|---|---|---|---|
| Union Springs | 1,065 | Imhoff | 0.106* | Unnamed stream (P-1) |
| Aurora | 1,072 | cont. stab. + aer. pond | 0.107* | Cayuga Lake |
| Dryden | 1,490 | trickling filter | 0.140* | Virgil Creek |
| Cayuga Hgts. | 3,130 | prim. clari. | 0.800* | Cayuga Lake |
| Ithaca | 27,226 | trickling filter | 5.586 | Cayuga Lake Inlet |
| Interla en | 733 | trickling filter | 0.209 | Unnamed stream (J-1) |
| Trumansburg | 1,618 | act. sludge | 0.200* | Trumansburg Creek |

2. Known industrial - None

† 1970 Census.
* Estimated at 100 gal/capita/day.

B. Annual Total Phosphorus Loading - Average Year:

1. Inputs -

| Source | lbs P/ yr | % of total |
|---|---|---|
| a. Tributaries (non-point load) - | | |
| Cayuga Inlet | 11,720 | 6.3 |
| Sixmile Creek | 4,340 | 2.3 |
| Cascadilla Creek | 4,840 | 2.6 |
| Fall Creek | 30,090 | 16.2 |
| Pleasant Grove Brook | 420 | 0.2 |
| Taughannock Creek | 6,500 | 3.5 |
| Trumansburg Creek | 7,090 | 3.8 |
| Unnamed stream (J-1) | 60 | <0.1 |
| Big Hollow Creek | 50 | <0.1 |
| Unnamed stream (P-1) | 310 | 0.2 |
| Great Gully Creek | 950 | 0.5 |
| Paines Creek | 5,520 | 3.0 |
| Salmon Creek | 10,800 | 5.8 |
| b. Minor tributaries & immediate drainage (non-point load) - | 13,600 | 7.3 |
| c. Known municipal STP's - | | |
| Ithaca | 56,000 | 30.2 |
| Cayuga Heights | 7,820 | 4.2 |
| Dryden | 3,720 | 2.0 |
| Aurora | 2,680 | 1.4 |
| Union Springs | 2,660 | 1.4 |
| Interlaken | 4,820 | 2.6 |
| Trumansburg | 4,050 | 2.2 |
| d. Septic tanks* - | 740 | 0.4 |
| e. Known industrial - None | - | - |
| f. Direct precipitation** - | 6,630 | 3.6 |
| Total | 185,410 | 100.0 |

* Estimate based on 1,181 lakeshore dwellings; see Working Paper No. 1.
** See Working Paper No. 1.

| Source | lbs N/ yr | % of total |
|---|---|---|
| 2. Outputs - | | |
| Lake outlet - Seneca River | 89,080 | |

3. Net annual P accumulation - 96,330 pounds

C. Annual Total Nitrogen Loading - Average Year:

1. Inputs -

| Source | lbs N/ yr | % of total |
|---|---|---|
| a. Tributaries (non-point load) - | | |
| Cayuga Inlet | 178,780 | 5.9 |
| Sixmile Creek | 81,850 | 2.7 |
| Cascadilla Creek | 43,660 | 1.4 |
| Fall Creek | 550,920 | 18.2 |
| Pleasant Grove Brook | 3,960 | 0.1 |
| Taughannock Creek | 198,840 | 6.6 |
| Trumansburg Creek | 53,500 | 1.8 |
| Unnamed stream (J-1) | 3,210 | 0.1 |
| Big Hollow Creek | 5,170 | 0.2 |
| Unnamed stream (P-1) | 10,130 | 0.3 |
| Great Gully Creek | 59,540 | 2.0 |
| Paines Creek | 54,560 | 1.8 |
| Salmon Creek | 400,520 | 13.2 |
| b. Minor tributaries & immediate drainage (non-point load) - | 563,380 | 18.6 |
| c. Known municipal STP's - | | |
| Ithaca | 290,620 | 9.6 |
| Cayuga Heights | 23,480 | 0.8 |
| Dryden | 11,180 | 0.4 |
| Aurora | 8,040 | 0.3 |
| Union Springs | 7,990 | 0.3 |
| Interlaken | 32,820 | 1.1 |
| Trumansburg | 12,140 | 0.4 |
| d. Septic tanks* - | 28,050 | 0.9 |
| e. Known industrial - None | - | - |
| f. Direct precipitation** - | 409,410 | 13.5 |
| Total | 3,031,250 | 100.0 |

* Estimate based on 1,181 lakeshore dwellings; see Working Paper No. 1.
** See Working Paper No. 1.

| Source | lbs N/ yr | % of total |
|---|---|---|
| 2. Outputs - | | |
| Lake outlet - Seneca River | 2,357,830 | |
| 3. Net annual N accumulation - 643,420 pounds | | |

D. Mean Annual Non-point Nutrient Export by Subdrainage Area:

| Tributary | lbs P/mi$^2$/yr | lbs N/mi$^2$/yr |
|---|---|---|
| Cayuga Inlet | 124 | 1,888 |
| Sixmile Creek | 88 | 1,640 |
| Cascadilla Creek | 353 | 3,187 |
| Fall Creek | 235 | 4,304 |
| Pleasant Grove Brook | 600 | 5,657 |
| Taughannock Creek | 97 | 2,968 |
| Trumansburg Creek | 525 | 3,963 |
| Unnamed stream (J-1) | 32 | 1,689 |
| Big Hollow Creek | 22 | 2,248 |
| Unnamed stream (P-1) | 124 | 4,052 |
| Great Gully Creek | 63 | 3,969 |
| Paines Creek | 358 | 3,543 |
| Salmon Creek | 121 | 4,490 |

E. Yearly Loading Rates:

In the following table, the existing phosphorus loading rates are compared to those proposed by Vollenweider (in press). Essentially, his "dangerous" rate is the rate at which the receiving waters would become eutrophic or remain eutrophic; his "permissible" rate is that which would result in the receiving water remaining oligotrophic or becoming oligotrophic if morphometry permitted. A mesotrophic rate would be considered one between "dangerous" and "permissible".

| Units | Total Phosphorus | | Total Nitrogen | |
|---|---|---|---|---|
| | Total | Accumulated | Total | Accumulated |
| lbs/acre/yr | 4.4 | 2.3 | 71.3 | 15.1 |
| grams/m$^2$/yr | 0.49 | 0.25 | 8.0 | 1.7 |

Vollenweider loading rates for phosphorus (g/m$^2$/yr) based on mean depth and mean hydraulic retention time of Cayuga Lake:

| | |
|---|---|
| "Dangerous" (eutrophic rate) | 0.44 |
| "Permissible" (oligotrophic rate) | 0.22 |

## V. LITERATURE REVIEWED

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# VII. APPENDICES

## APPENDIX A

## TRIBUTARY FLOW DATA

TRIBUTARY FLOW INFORMATION FOR NEW YORK 11/26/74

LAKE CODE 360R CAYUGA LAKE

TOTAL DRAINAGE AREA OF LAKE 1564.00

| TRIBUTARY | SUB-DRAINAGE AREA | NORMALIZED FLOWS JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC | MEAN |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 360RA1 | 94.70 | 83.00 | 115.00 | 254.00 | 220.00 | 142.00 | 75.00 | 28.00 | 25.00 | 21.00 | 46.00 | 59.00 | 86.00 | 96.04 |
| 360RH1 | 49.60 | 49.00 | 57.00 | 128.00 | 115.00 | 66.00 | 23.00 | 17.40 | 13.20 | 13.40 | 24.00 | 37.00 | 48.00 | 49.21 |
| 360RC1 | 13.70 | 17.00 | 20.00 | 45.00 | 40.00 | 23.00 | 11.00 | 6.00 | 4.60 | 4.60 | 8.30 | 13.00 | 17.00 | 17.44 |
| 360RD1 | 129.00 | 188.00 | 196.00 | 442.00 | 414.00 | 214.00 | 114.00 | 71.00 | 48.00 | 54.00 | 84.00 | 150.00 | 184.00 | 179.75 |
| 360RE1 | 0.73 | 1.10 | 1.10 | 2.60 | 2.40 | 1.20 | 0.70 | 0.40 | 0.30 | 0.30 | 0.50 | 0.90 | 1.10 | 1.05 |
| 360RF1 | 67.00 | 78.00 | 92.00 | 200.00 | 180.00 | 110.00 | 53.00 | 28.00 | 21.00 | 22.00 | 38.00 | 60.00 | 78.00 | 79.92 |
| 360RG1 | 13.50 | 14.00 | 16.00 | 37.00 | 33.00 | 19.00 | 9.50 | 5.10 | 3.80 | 3.90 | 6.90 | 11.00 | 14.00 | 14.42 |
| 360RJ1 | 1.94 | 0.70 | 0.90 | 1.90 | 1.70 | 1.00 | 0.50 | 0.30 | 0.20 | 0.20 | 0.40 | 0.60 | 0.70 | 0.76 |
| 360RM1 | 2.29 | 1.00 | 1.10 | 2.50 | 2.30 | 1.30 | 0.70 | 0.40 | 0.30 | 0.30 | 0.50 | 0.90 | 1.00 | 1.02 |
| 360RN1 | 779.00 | 460.00 | 460.00 | 690.00 | 1030.00 | 900.00 | 680.00 | 390.00 | 380.00 | 270.00 | 260.00 | 320.00 | 360.00 | 516.49 |
| 360RN2 | 1564.00 | 1688.90 | 1906.49 | 2134.44 | 2383.12 | 1989.38 | 1512.76 | 1006.09 | 816.48 | 836.16 | 784.36 | 908.69 | 1471.31 | 1449.93 |
| 360RP1 | 2.48 | 2.80 | 2.90 | 6.60 | 6.20 | 3.20 | 1.70 | 1.10 | 0.70 | 0.80 | 1.30 | 2.30 | 2.80 | 2.70 |
| 360RQ1 | 15.00 | 17.00 | 17.00 | 39.00 | 37.00 | 19.00 | 10.00 | 6.30 | 4.30 | 4.80 | 7.50 | 13.00 | 16.00 | 15.90 |
| 360RR1 | 15.40 | 6.80 | 7.90 | 18.00 | 16.00 | 9.10 | 4.60 | 2.40 | 1.80 | 1.90 | 3.30 | 5.20 | 6.70 | 6.97 |
| 360RS1 | 89.20 | 110.00 | 120.00 | 280.00 | 250.00 | 140.00 | 71.00 | 39.00 | 29.00 | 30.00 | 51.00 | 83.00 | 110.00 | 109.34 |
| 360RZZ | 291.46 | 350.00 | 410.00 | 920.00 | 830.00 | 470.00 | 240.00 | 130.00 | 95.00 | 97.00 | 170.00 | 270.00 | 330.00 | 358.92 |

SUMMARY

TOTAL DRAINAGE AREA OF LAKE = 1564.00
SUM OF SUB-DRAINAGE AREAS = 1564.00

TOTAL FLOW IN = 17412.48
TOTAL FLOW OUT = 17438.16

NOTE *** TRIB ORN1=35P1

MEAN MONTHLY FLOWS AND DAILY FLOWS

| TRIBUTARY | MONTH | YEAR | MEAN FLOW | DAY | FLOW | DAY | FLOW | DAY | FLOW |
|---|---|---|---|---|---|---|---|---|---|
| 360RA1 | 11 | 72 | 181.00 | 4 | 45.00 | | | | |
| | 12 | 72 | 300.00 | 2 | 130.00 | | | | |
| | 1 | 73 | 120.00 | 6 | 120.00 | | | | |
| | 2 | 73 | 156.00 | 3 | 616.00 | | | | |
| | 3 | 73 | 213.00 | 4 | 316.00 | | | | |
| | 4 | 73 | 273.00 | 7 | 346.00 | 21 | 114.00 | | |
| | 5 | 73 | 160.00 | 5 | 150.00 | 19 | 160.00 | | |
| | 6 | 73 | 55.00 | 2 | 94.00 | 30 | 36.00 | | |
| | 7 | 73 | 26.00 | 29 | 93.00 | | | | |
| | 9 | 73 | 22.00 | 23 | 55.00 | | | | |
| | 10 | 73 | 20.00 | 20 | 20.00 | | | | |

TRIBUTARY FLOW INFORMATION FOR NEW YORK 11/26/74

LAKE CODE 360A CAYUGA LAKE

MEAN MONTHLY FLOWS AND DAILY FLOWS

| TRIBUTARY | MONTH | YEAR | MEAN FLOW | DAY | FLOW | DAY | FLOW | DAY | FLOW |
|---|---|---|---|---|---|---|---|---|---|
| 360881 | 11 | 72 | 110.00 | 4 | 26.00 | | | | |
| | 12 | 72 | 170.00 | 2 | 77.00 | | | | |
| | 1 | 73 | 72.00 | 6 | 69.00 | | | | |
| | 2 | 73 | 74.00 | 3 | 380.00 | | | | |
| | 3 | 73 | 110.00 | 4 | 180.00 | | | | |
| | 4 | 73 | 140.00 | 7 | 190.00 | 21 | 56.00 | | |
| | 5 | 73 | 73.00 | 5 | 72.00 | 19 | 75.00 | | |
| | 6 | 73 | 20.00 | 2 | 36.00 | 30 | 18.00 | | |
| | 7 | 73 | 13.00 | 29 | 30.00 | | | | |
| | 9 | 73 | 11.00 | 23 | 24.00 | | | | |
| | 10 | 73 | 9.10 | 20 | 11.00 | | | | |
| 360BC1 | 11 | 72 | 40.00 | 4 | 9.00 | | | | |
| | 12 | 72 | 59.00 | 2 | 27.00 | | | | |
| | 1 | 73 | 25.00 | 6 | 24.00 | | | | |
| | 2 | 73 | 26.00 | 3 | 130.00 | | | | |
| | 3 | 73 | 39.00 | 4 | 62.00 | | | | |
| | 4 | 73 | 49.00 | 7 | 66.00 | 21 | 20.00 | | |
| | 5 | 73 | 26.00 | 5 | 25.00 | 19 | 26.00 | | |
| | 6 | 73 | 9.50 | 2 | 15.00 | 30 | 7.20 | | |
| | 7 | 73 | 4.60 | 29 | 11.00 | | | | |
| | 9 | 73 | 3.80 | 23 | 6.00 | | | | |
| | 10 | 73 | 3.20 | 20 | 3.80 | | | | |
| 360BD1 | 11 | 72 | 377.00 | 4 | 186.00 | | | | |
| | 12 | 72 | 542.00 | 2 | 237.00 | | | | |
| | 1 | 73 | 271.00 | 6 | 257.00 | | | | |
| | 2 | 73 | 243.00 | 3 | 1540.00 | | | | |
| | 3 | 73 | 395.00 | 4 | 662.00 | | | | |
| | 4 | 73 | 413.00 | 7 | 698.00 | 21 | 192.00 | | |
| | 5 | 73 | 237.00 | 5 | 244.00 | 19 | 242.00 | | |
| | 6 | 73 | 112.00 | 2 | 143.00 | 30 | 90.00 | | |
| | 7 | 73 | 42.00 | 29 | 40.00 | | | | |
| | 9 | 73 | 32.00 | 23 | 59.00 | | | | |
| | 10 | 73 | 27.00 | 20 | 34.00 | | | | |
| 360BE1 | 11 | 72 | 2.30 | 4 | 1.10 | | | | |
| | 12 | 72 | 3.30 | 2 | 1.40 | | | | |
| | 1 | 73 | 1.60 | 6 | 1.50 | | | | |
| | 2 | 73 | 1.40 | 3 | 8.90 | | | | |
| | 3 | 73 | 2.30 | 4 | 3.80 | | | | |
| | 4 | 73 | 2.90 | 7 | 4.10 | 21 | 1.10 | | |
| | 5 | 73 | 1.30 | 5 | 1.40 | 19 | 1.40 | | |
| | 6 | 73 | 0.70 | 2 | 0.80 | 30 | 0.50 | | |
| | 7 | 73 | 0.20 | 29 | 0.20 | | | | |
| | 9 | 73 | 0.20 | 23 | 0.20 | | | | |
| | 10 | 73 | 0.20 | 20 | 0.20 | | | | |

TRIBUTARY FLOW INFORMATION FOR NEW YORK 11/26/74

LAKE CODE 360A CAYUGA LAKE

MEAN MONTHLY FLOWS AND DAILY FLOWS

| TRIBUTARY | MONTH | YEAR | MEAN FLOW | DAY | FLOW | DAY | FLOW | DAY | FLOW |
|---|---|---|---|---|---|---|---|---|---|
| 360AF1 | 11 | 72 | 170.00 | 4 | 60.00 | | | | |
| | 12 | 72 | 250.00 | 2 | 110.00 | | | | |
| | 1 | 73 | 110.00 | 6 | 110.00 | | | | |
| | 2 | 73 | 120.00 | 3 | 610.00 | | | | |
| | 3 | 73 | 170.00 | 4 | 280.00 | | | | |
| | 4 | 73 | 220.00 | 7 | 290.00 | 21 | 88.00 | | |
| | 4 | 73 | 220.00 | 7 | 290.00 | | | | |
| | 5 | 73 | 120.00 | 5 | 120.00 | 19 | 120.00 | | |
| | 6 | 73 | 46.00 | 2 | 70.00 | 30 | 34.00 | | |
| | 7 | 73 | 21.00 | 29 | 51.00 | | | | |
| | 9 | 73 | 18.00 | 22 | 25.00 | | | | |
| | 10 | 73 | 14.00 | 20 | 17.00 | | | | |
| 360AG1 | 11 | 72 | 30.00 | 4 | 11.00 | | | | |
| | 12 | 72 | 45.00 | 2 | 20.00 | | | | |
| | 1 | 73 | 20.00 | 6 | 20.00 | | | | |
| | 2 | 73 | 21.00 | 3 | 110.00 | | | | |
| | 3 | 73 | 32.00 | 4 | 50.00 | | | | |
| | 4 | 73 | 40.00 | 7 | 54.00 | 21 | 16.00 | | |
| | 5 | 73 | 21.00 | 5 | 21.00 | 19 | 21.00 | | |
| | 6 | 73 | 8.20 | 2 | 12.00 | 30 | 6.20 | | |
| | 7 | 73 | 4.00 | 29 | 9.00 | | | | |
| | 9 | 73 | 3.00 | 22 | 4.00 | | | | |
| | 10 | 73 | 2.60 | 20 | 3.10 | | | | |
| 360AJ1 | 11 | 72 | 1.70 | 4 | 0.60 | | | | |
| | 12 | 72 | 2.20 | 2 | 1.10 | | | | |
| | 1 | 73 | 1.00 | 6 | 1.00 | | | | |
| | 2 | 73 | 1.20 | 4 | 2.30 | | | | |
| | 3 | 73 | 1.60 | 4 | 2.70 | | | | |
| | 4 | 73 | 2.10 | 7 | 2.80 | 22 | 0.80 | | |
| | 5 | 73 | 1.10 | 5 | 1.10 | 20 | 1.10 | | |
| | 6 | 73 | 0.40 | 3 | 0.60 | | | | |
| | 7 | 73 | 0.20 | 29 | 0.50 | | | | |
| | 8 | 73 | 0.20 | 19 | 0.10 | | | | |
| | 9 | 73 | 0.20 | 9 | 0.10 | | | | |
| | 10 | 73 | 0.20 | 6 | 0.10 | | | | |
| 360AM1 | 11 | 72 | 2.20 | 5 | 0.70 | | | | |
| | 12 | 72 | 3.20 | 2 | 1.50 | | | | |
| | 1 | 73 | 1.50 | 6 | 1.60 | | | | |
| | 2 | 73 | 1.40 | 4 | 3.00 | | | | |
| | 3 | 73 | 2.20 | 4 | 3.40 | | | | |
| | 4 | 73 | 2.80 | 7 | 3.70 | 22 | 1.00 | | |
| | 5 | 73 | 1.40 | 5 | 1.40 | 20 | 1.40 | | |
| | 6 | 73 | 0.60 | 3 | 0.80 | | | | |
| | 7 | 73 | 0.30 | 29 | 0.70 | | | | |
| | 8 | 73 | 0.20 | 19 | 0.20 | | | | |
| | 9 | 73 | 0.20 | 9 | 0.20 | | | | |
| | 10 | 73 | 0.20 | 6 | 0.20 | | | | |

TRIBUTARY FLOW INFORMATION FOR NEW YORK 11/26/74

LAKE CODE 360B CAYUGA LAKE

MEAN MONTHLY FLOWS AND DAILY FLOWS

| TRIBUTARY | MONTH | YEAR | MEAN FLOW | DAY | FLOW | DAY | FLOW | DAY | FLOW |
|---|---|---|---|---|---|---|---|---|---|
| 360BN1 | 1 | 73 | 1500.00 | 6 | 2500.00 | | | | |
| | 2 | 73 | 940.00 | 4 | 950.00 | | | | |
| | 3 | 73 | 510.00 | 4 | 1500.00 | | | | |
| | 4 | 73 | 130.00 | 19 | 910.00 | 26 | 700.00 | | |
| | 5 | 73 | 990.00 | 17 | 1100.00 | 31 | 900.00 | | |
| | 7 | 73 | 100.00 | 31 | 20.00 | | | | |
| | 8 | 73 | 140.00 | 16 | 185.00 | | | | |
| | 10 | 73 | 13.00 | 13 | 100.00 | | | | |
| 360BN2 | 11 | 72 | 3130.00 | 5 | 660.00 | | | | |
| | 1 | 73 | 5240.00 | 6 | 5880.00 | | | | |
| | 2 | 73 | 3740.00 | 4 | 4040.00 | | | | |
| | 3 | 73 | 1500.00 | 4 | 283.00 | | | | |
| | 4 | 73 | 3060.00 | 19 | 2680.00 | 26 | 1580.00 | | |
| | 5 | 73 | 2390.00 | 13 | 2650.00 | 17 | 2740.00 | 31 | 2660.00 |
| | 7 | 73 | 357.00 | 31 | 223.00 | | | | |
| | 8 | 73 | 219.00 | 16 | 221.00 | | | | |
| | 9 | 73 | 211.00 | 23 | 212.00 | | | | |
| | 10 | 73 | 298.00 | 13 | 195.00 | | | | |
| 360BP1 | 11 | 72 | 5.80 | 5 | 2.50 | | | | |
| | 12 | 72 | 8.30 | 3 | 3.80 | | | | |
| | 1 | 73 | 4.10 | 6 | 3.90 | | | | |
| | 2 | 73 | 3.60 | 4 | 7.50 | | | | |
| | 3 | 73 | 5.90 | 4 | 9.90 | | | | |
| | 4 | 73 | 7.50 | 19 | 3.20 | 26 | 2.40 | | |
| | 5 | 73 | 3.60 | 13 | 4.60 | 17 | 2.80 | 31 | 2.70 |
| | 7 | 73 | 0.70 | 31 | 0.50 | | | | |
| | 8 | 73 | 0.40 | 16 | 0.40 | | | | |
| | 9 | 73 | 0.50 | 23 | 0.90 | | | | |
| | 10 | 73 | 0.40 | 13 | 0.40 | | | | |
| 360BQ1 | 11 | 72 | 33.00 | 5 | 14.00 | | | | |
| | 12 | 72 | 48.00 | 3 | 21.00 | | | | |
| | 1 | 73 | 25.00 | 6 | 23.00 | | | | |
| | 2 | 73 | 21.00 | 4 | 45.00 | | | | |
| | 3 | 73 | 35.00 | 4 | 58.00 | | | | |
| | 4 | 73 | 45.00 | 19 | 19.00 | 26 | 14.00 | | |
| | 5 | 73 | 21.00 | 13 | 27.00 | 17 | 17.00 | 31 | 16.00 |
| | 7 | 73 | 3.70 | 31 | 2.80 | | | | |
| | 8 | 73 | 2.50 | 16 | 2.40 | | | | |
| | 9 | 73 | 2.90 | 23 | 5.30 | | | | |
| | 10 | 73 | 2.40 | 13 | 2.20 | | | | |

TRIBUTARY FLOW INFORMATION FOR NEW YORK 11/26/74

LAKE CODE 360B CAYUGA LAKE

MEAN MONTHLY FLOWS AND DAILY FLOWS

| TRIBUTARY | MONTH | YEAR | MEAN FLOW | DAY | FLOW | DAY | FLOW | DAY | FLOW |
|---|---|---|---|---|---|---|---|---|---|
| 360B21 | 11 | 72 | 14.00 | 4 | 6.00 | | | | |
| | 12 | 72 | 22.00 | 3 | 10.00 | | | | |
| | 1 | 73 | 9.90 | 6 | 9.50 | | | | |
| | 2 | 73 | 10.00 | 4 | 21.00 | | | | |
| | 3 | 73 | 16.00 | 4 | 24.00 | | | | |
| | 4 | 73 | 20.00 | 19 | 8.80 | 26 | 6.50 | | |
| | 5 | 73 | 10.00 | 13 | 13.00 | 17 | 8.10 | 31 | 7.50 |
| | 7 | 73 | 1.80 | 31 | 1.40 | | | | |
| | 8 | 73 | 1.20 | 16 | 1.20 | | | | |
| | 9 | 73 | 1.40 | 23 | 3.20 | | | | |
| | 10 | 73 | 1.20 | 13 | 1.00 | | | | |
| 360B51 | 11 | 72 | 230.00 | 4 | 82.00 | | | | |
| | 12 | 72 | 350.00 | 2 | 160.00 | | | | |
| | 1 | 73 | 150.00 | 6 | 150.00 | | | | |
| | 2 | 73 | 160.00 | 3 | 830.00 | | | | |
| | 3 | 73 | 240.00 | 4 | 380.00 | | | | |
| | 4 | 73 | 310.00 | 7 | 410.00 | 21 | 120.00 | | |
| | 5 | 73 | 160.00 | 5 | 150.00 | 19 | 160.00 | | |
| | 6 | 73 | 61.00 | 2 | 91.00 | 30 | 47.00 | | |
| | 7 | 73 | 30.00 | 28 | 40.00 | | | | |
| | 9 | 73 | 25.00 | 23 | 52.00 | | | | |
| | 10 | 73 | 19.00 | 20 | 23.00 | | | | |
| 360B27 | 11 | 72 | 750.00 | | | | | | |
| | 12 | 72 | 1100.00 | | | | | | |
| | 1 | 73 | 510.00 | | | | | | |
| | 2 | 73 | 530.00 | | | | | | |
| | 3 | 73 | 800.00 | | | | | | |
| | 4 | 73 | 1000.00 | | | | | | |
| | 5 | 73 | 520.00 | | | | | | |
| | 6 | 73 | 210.00 | | | | | | |
| | 7 | 73 | 99.00 | | | | | | |
| | 8 | 73 | 71.00 | | | | | | |
| | 9 | 73 | 80.00 | | | | | | |
| | 10 | 73 | 74.00 | | | | | | |

# APPENDIX B

## PHYSICAL and CHEMICAL DATA

STORET RETRIEVAL DATE 74/11/26

360801
42 00 00.0 076 44 00.0
LAKE CAYUGA
36 NEW YORK

11EPALES
5

2111202
0128 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00010 WATER TEMP CENT | 00300 DO MG/L | 00077 TRANSP SECCHI INCHES | 00094 CNDUCTVY FIELD MICROMHO | 00400 PH SU | 00410 T ALK CACO3 MG/L | 00630 NO2&NO3 N-TOTAL MG/L | 00610 NH3-N TOTAL MG/L | 00665 PHOS-TOT MG/L P | 00666 PHOS-DIS MG/L P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72/05/16 | 09 45 | 0000 | 8.5 | 11.0 | 51 | 1 | 8.00 | 104 | 0.870 | 0.090 | 0.032 | 0.027 |
| | 09 45 | 0010 | 6.3 | 11.6 | | 1 | 7.90 | 106 | 0.870 | 0.070 | 0.025 | 0.016 |
| 72/07/23 | 13 35 | 0000 | | | 64 | 500 | 7.90 | 104 | 0.630 | 0.050 | 0.020 | 0.010 |
| | 13 35 | 0004 | 26.4 | 9.2 | | 500 | 7.90 | 103 | 0.650 | 0.060 | 0.019 | 0.009 |
| | 13 35 | 0015 | 18.1 | 8.0 | | 520 | 7.50 | 107 | 0.740 | 0.130 | 0.014 | 0.009 |
| | 13 35 | 0044 | 14.6 | 9.0 | | 520 | 7.50 | 110 | 0.790 | 0.130 | 0.014 | 0.010 |
| 72/10/13 | 08 50 | 0000 | | | 200 | 490 | 8.25 | 103 | 0.690 | 0.040 | 0.009 | 0.005 |
| | 08 50 | 0004 | 13.3 | 10.0 | | 475 | 8.25 | 101 | 0.700 | 0.040 | 0.009 | 0.005 |
| | 08 50 | 0015 | 13.3 | 10.0 | | 480 | 8.25 | 100 | 0.690 | 0.040 | 0.008 | 0.005 |
| | 08 50 | 0025 | 13.3 | 8.8 | | 480 | 8.25 | 102 | 0.730 | 0.030 | 0.008 | 0.007 |
| | 08 50 | 0035 | 13.3 | 9.7 | | 480 | 8.25 | 103 | 0.720 | 0.030 | 0.008 | 0.005 |
| | 08 50 | 0045 | 13.3 | 9.8 | | 480 | 8.25 | 100 | 0.720 | 0.020 | 0.008 | 0.005 |
| | 08 50 | 0060 | 12.8 | 9.8 | | 480 | 8.20 | 103 | 0.670 | 0.030 | 0.009 | 0.005 |
| | 08 50 | 0069 | 8.4 | 10.0 | | 490 | 7.95 | 104 | 0.840 | 0.030 | 0.014 | 0.008 |

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 32217 CHLRPHYL A UG/L |
|---|---|---|---|
| 72/05/16 | 09 45 | 0000 | 0.1J |
| 72/07/23 | 13 35 | 0000 | 5.7J |
| 72/10/13 | 08 50 | 0000 | 2.4J |

J VALUE KNOWN TO BE IN ERROR

STORET RETRIEVAL DATE 74/11/26

360802
42 41 00.0 076 41 00.0
LAKE CAYUGA
36 NEW YORK

11EPALES
5

2111202
010A FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00010 WATER TEMP CENT | 00300 OO MG/L | 00077 TRANSP SECCHI INCHES | 00094 CNDUCTVY FIELD MICROMHO | 00400 PH SU | 00410 T ALK CACO3 MG/L | 00630 NO2&NO3 N-TOTAL MG/L | 00610 NH3-N TOTAL MG/L | 00665 PHOS-TOT MG/L P | 00666 PHOS-DIS MG/L P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72/05/16 | 10 | 35 0000 | 5.4 | 11.8 | 54 | 1 | 7.80 | 107 | 0.840 | 0.030 | 0.021 | |
| | 10 | 35 0010 | 4.5 | 13.2 | | 1 | 8.00 | 109 | 0.820 | 0.030 | 0.018 | |
| | 10 | 35 0020 | 4.2 | 12.0 | | 1 | 7.80 | 111 | 0.840 | 0.040 | 0.019 | 0.011 |
| 72/07/23 | 10 | 25 0000 | | | 72 | | | 102 | 0.700 | 0.070 | 0.014 | 0.010 |
| | 10 | 25 0004 | 23.1 | 6.6 | | | | 103 | 0.690 | 0.060 | 0.019 | 0.011 |
| | 10 | 25 0015 | 21.9 | 9.6 | | 530 | 7.50 | 103 | 0.690 | 0.060 | 0.020 | 0.010 |
| | 10 | 25 0050 | 9.3 | 11.6 | | 560 | 7.40 | 108 | 0.820 | 0.110 | 0.013 | 0.014 |
| | 10 | 25 0100 | 5.7 | 12.2 | | 560 | 7.40 | 103 | 0.800 | 0.090 | 0.016 | 0.011 |
| | 10 | 25 0200 | 4.3 | 12.8 | | 560 | 7.40 | 110 | 0.850 | 0.100 | 0.018 | 0.012 |
| | 10 | 25 0287 | 4.2 | 10.0 | | 560 | 7.40 | 112 | 0.840 | 0.070 | 0.019 | 0.014 |
| | 10 | 25 0337 | 4.3 | 11.0 | | 560 | 7.30 | 112 | 0.860 | 0.090 | 0.029 | 0.018 |
| 72/10/13 | 09 | 40 0000 | | | 192 | 500 | 8.20 | 88 | 0.390 | 0.040 | 0.008 | 0.002 |
| | 09 | 40 0004 | 13.0 | 10.0 | | 500 | 8.20 | 88 | 0.390 | 0.040 | 0.006 | 0.005 |
| | 09 | 40 0015 | 13.1 | 10.0 | | 500 | 8.20 | 89 | 0.380 | 0.040 | 0.007 | 0.005 |
| | 09 | 40 0025 | 13.1 | 9.9 | | 480 | 8.20 | 106 | 0.720 | 0.040 | 0.008 | 0.004 |
| | 09 | 40 0040 | 13.0 | 10.0 | | 480 | 8.20 | 104 | 0.720 | 0.040 | 0.009 | 0.005 |
| | 09 | 40 0060 | 12.9 | 9.9 | | 480 | 8.20 | 108 | 0.720 | 0.040 | 0.009 | 0.006 |
| | 09 | 40 0075 | 12.9 | 9.9 | | 480 | 8.20 | 108 | 0.720 | 0.040 | 0.007 | 0.006 |
| | 09 | 40 0100 | 12.5 | 10.0 | | 480 | 8.15 | 106 | 0.730 | 0.040 | 0.008 | 0.005 |
| | 09 | 40 0150 | 8.5 | 10.3 | | 510 | 7.95 | 105 | 0.790 | 0.030 | 0.010 | 0.009 |
| | 09 | 40 0200 | 5.6 | 10.6 | | 510 | 7.85 | 107 | 0.830 | 0.030 | 0.017 | 0.013 |
| | 09 | 40 0250 | 5.5 | 10.6 | | 500 | 7.90 | 107 | 0.830 | 0.030 | 0.017 | 0.013 |
| | 09 | 40 0300 | 5.1 | 10.6 | | 500 | 7.85 | 104 | 0.830 | 0.030 | 0.018 | 0.015 |
| | 09 | 40 0323 | 4.8 | 10.6 | | 500 | 7.85 | 105 | 0.830 | 0.030 | 0.020 | 0.016 |

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 32217 CHLRPHYL A UG/L |
|---|---|---|---|
| 72/05/16 | 10 | 35 0000 | 0.1J |
| 72/07/23 | 10 | 25 0000 | 3.5J |
| 72/10/13 | 09 | 40 0000 | 2.4J |

J VALUE KNOWN TO BE IN ERROR

STORET RETRIEVAL DATE 74/11/26

360803
42 30 00.0 076 31 30.0
LAKE CAYUGA
36 NEW YORK

11EPALES 2111202
5 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00010 WATER TEMP CENT | 00300 DO MG/L | 00077 TRANSP SECCHI INCHES | 00094 CNDUCTVY FIELD MICROMHO | 00400 PH SU | 00410 T ALK CACO3 MG/L | 00630 NO2&NO3 N-TOTAL MG/L | 00610 NH3-N TOTAL MG/L | 00665 PHOS-TOT MG/L P | 00666 PHOS-DIS MG/L P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72/05/16 | 13 | 07 0000 | 10.2 | 14.4 | 86 | 1 | 8.10 | 112 | 0.770 | 0.040 | 0.017 | 0.009 |
| | 13 | 07 0010 | 6.0 | 14.0 | | 1 | 8.10 | 115 | 0.780 | 0.040 | 0.019 | 0.008 |
| | 13 | 07 0020 | 5.7 | 12.6 | | 1 | 8.10 | 111 | 0.760 | 0.020 | 0.016 | |
| 72/07/23 | 14 | 15 0000 | | | 77 | 490 | 7.90 | 102 | 0.680 | 0.070 | 0.022 | 0.009 |
| | 14 | 15 0004 | 23.9 | 8.2 | | 490 | 7.90 | 101 | 0.700 | 0.070 | 0.023 | 0.011 |
| | 14 | 15 0015 | 21.9 | 10.8 | | 500 | 7.80 | 101 | 0.710 | 0.080 | 0.019 | 0.010 |
| | 14 | 15 0050 | 10.0 | 9.8 | | 530 | 7.50 | 107 | 0.830 | 0.080 | 0.018 | 0.010 |
| | 14 | 15 0125 | 5.5 | 11.6 | | 560 | 7.40 | 112 | 0.840 | 0.080 | 0.016 | 0.012 |
| | 14 | 15 0283 | 4.5 | 12.0 | | 560 | 7.30 | 114 | 0.860 | 0.090 | 0.028 | 0.014 |
| 72/10/13 | 13 | 10 0000 | | | 192 | 520 | 8.15 | 105 | 0.740 | 0.050 | 0.009 | 0.006 |
| | 13 | 10 0004 | 12.9 | 10.1 | | 520 | 8.15 | 101 | 0.740 | 0.040 | 0.008 | 0.006 |
| | 13 | 10 0015 | 12.5 | 10.0 | | 520 | 8.15 | 104 | 0.740 | 0.040 | 0.009 | 0.006 |
| | 13 | 10 0025 | 12.5 | 10.1 | | 500 | 8.15 | 102 | 0.740 | 0.040 | 0.009 | 0.006 |
| | 13 | 10 0040 | 12.4 | 10.2 | | 495 | 8.15 | 102 | 0.740 | 0.040 | 0.010 | 0.007 |
| | 13 | 10 0060 | 12.1 | 10.0 | | 500 | 8.15 | 102 | 0.740 | 0.040 | 0.011 | 0.006 |
| | 13 | 10 0080 | 12.1 | 10.2 | | 500 | 8.15 | 105 | 0.740 | 0.040 | 0.010 | 0.007 |
| | 13 | 10 0100 | 12.1 | 10.1 | | 500 | 8.15 | 105 | 0.740 | 0.040 | 0.015 | 0.006 |
| | 13 | 10 0150 | 11.8 | 10.2 | | 480 | 8.05 | 105 | 0.750 | 0.050 | 0.011 | 0.007 |
| | 13 | 10 0200 | 9.8 | 10.4 | | 500 | 8.00 | 110 | 0.780 | 0.040 | 0.012 | 0.008 |
| | 13 | 10 0230 | 5.5 | 10.6 | | 500 | 7.85 | 109 | 0.840 | 0.040 | 0.039 | 0.014 |
| | 13 | 10 0269 | 4.6 | 10.4 | | 500 | 7.85 | 111 | 0.850 | 0.040 | 0.021 | 0.016 |

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 32217 CHLRPHYL A UG/L |
|---|---|---|---|
| 72/05/16 | 13 | 07 0000 | 0.3J |
| 72/07/23 | 14 | 15 0000 | 10.0J |
| 72/10/13 | 13 | 10 0000 | 3.7J |

J VALUE KNOWN TO BE IN ERROR

STORET RETRIEVAL DATE 74/11/26

360804
42 28 00.0 076 31 00.0
LAKE CAYUGA
36 NEW YORK

11EPALES
5

2111202
0021 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00010 WATER TEMP CENT | 00300 DO MG/L | 00077 TRANSP SECCHI INCHES | 00094 CNDUCTVY FIELD MICROMHO | 00400 PH SU | 00410 T ALK CACO3 MG/L | 00630 NO2&NO3 N-TOTAL MG/L | 00610 NH3-N TOTAL MG/L | 00665 PHOS-TOT MG/L P | 00666 PHOS-DIS MG/L P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 72/07/23 | 16 20 | 0000 | | | 72 | 480 | 7.90 | 99 | 0.670 | 0.080 | 0.021 | 0.009 |
| | 16 20 | 0004 | 24.4 | 11.2 | | 480 | 7.90 | 100 | 0.660 | 0.070 | 0.017 | 0.008 |
| | 16 20 | 0015 | 22.6 | 9.6 | | 490 | 7.80 | 101 | 0.690 | 0.080 | 0.018 | 0.007 |
| | 16 20 | 0018 | 22.4 | 10.8 | | 490 | 7.80 | 101 | 0.670 | 0.070 | 0.017 | 0.006 |
| 72/10/13 | 14 15 | 0000 | | | 168 | 500 | 8.20 | 106 | 0.740 | 0.040 | 0.009 | 0.006 |
| | 14 15 | 0004 | 12.5 | 10.3 | | 520 | 8.20 | 107 | 0.740 | 0.040 | 0.009 | 0.006 |
| | 14 15 | 0010 | 12.5 | 10.3 | | 520 | 8.25 | 106 | 0.740 | 0.040 | 0.009 | 0.006 |

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 32217 CHLRPHYL A UG/L |
|---|---|---|---|
| 72/07/23 | 16 20 | 0000 | 5.3J |
| 72/10/13 | 14 15 | 0000 | 2.1J |

J VALUE KNOWN TO BE IN ERROR

# APPENDIX C

## TRIBUTARY and WASTEWATER TREATMENT PLANT DATA

STORET RETRIEVAL DATE 74/11/26

3608A1 LS360RA1
42 28 00.0 076 31 30.0
CAYUGA INLET
36 7.5 ITHACA WEST
I/CAYUGA LAKE
BUFFALO ST BRDG BELO ITHACA STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 13 | 32 | 0.250 | 0.370 | 0.072 | 0.009 | 0.044 |
| 72/12/02 | 12 | 00 | 0.610 | 0.360 | 0.180 | 0.015 | 0.042 |
| 73/01/06 | 13 | 00 | 0.520 | 0.280 | 0.092 | 0.017 | 0.052 |
| 73/02/03 | 13 | 30 | 0.550 | 1.050 | 0.069 | 0.031 | 0.375 |
| 73/03/04 | 13 | 00 | 0.780 | 0.610 | 0.138 | 0.015 | 0.075 |
| 73/04/07 | 13 | 00 | 0.530 | 0.390 | 0.105 | 0.019 | 0.060 |
| 73/04/21 | 13 | 00 | 0.510 | 0.440 | 0.120 | 0.014 | 0.045 |
| 73/05/05 | 13 | 00 | 0.350 | 0.880 | 0.052 | 0.007 | 0.040 |
| 73/05/19 | 11 | 15 | 1.400 | 0.270 | 0.081 | 0.007 | 0.020 |
| 73/06/02 | 17 | 25 | 0.210 | 0.340 | 0.092 | 0.005K | 0.020 |
| 73/06/30 | 10 | 50 | 0.350 | 5.600 | 0.190 | 0.017 | 0.040 |
| 73/07/29 | | | 0.252 | 0.840 | 0.120 | 0.018 | 0.070 |
| 73/09/23 | 10 | 30 | 0.540 | 1.500 | 0.890 | 0.066 | 0.155 |
| 73/10/20 | 15 | 00 | 0.520 | 2.100 | 0.735 | 0.088 | 0.190 |

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608A2 LS3608A2
42 25 00.0 076 33 30.0
CAYUGA INLET
36 7.5 ITHACA WEST
I/CAYUGA LAKE
HWY 13 BRDG ABOVE ITHACA STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 13 00 | | 0.320 | 0.210 | 0.014 | 0.005K | 0.018 |
| 72/12/02 | 11 25 | | 0.900 | 0.630 | 0.022 | 0.00[illegible] | 0.016 |
| 73/01/06 | 11 15 | | 0.900 | 0.560 | 0.009 | 0.007 | 0.023 |
| 73/02/03 | 11 05 | | 0.790 | 0.400 | 0.038 | 0.015 | 0.270 |
| 73/03/04 | 11 10 | | 0.870 | 0.880 | 0.035 | 0.010 | 0.220 |
| 73/04/07 | 11 05 | | 0.760 | 0.250 | 0.035 | 0.012 | 0.065 |
| 73/04/21 | 11 00 | | 0.610 | 0.230 | 0.011 | 0.005K | 0.015 |
| 73/05/05 | 11 10 | | 0.460 | 0.180 | 0.005K | 0.005K | 0.010 |
| 73/06/02 | 17 00 | | 0.198 | 0.170 | 0.007 | 0.005K | 0.010 |
| 73/06/30 | 10 25 | | 0.270 | 0.460 | 0.042 | 0.009 | 0.060 |
| 73/07/29 | 11 05 | | 0.280 | 0.440 | 0.023 | 0.007 | 0.045 |
| 73/09/23 | 09 30 | | 0.430 | 0.920 | 0.054 | 0.014 | 0.047 |
| 73/10/20 | 15 30 | | 0.038 | 0.150 | 0.037 | 0.005K | 0.005K |

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

360BR1 LS3603R1
42 26 00.0 076 31 00.0
SIXMILE CREEK
36 7.5 ITHACA WEST
T/CAYUGA LAKE
HANCOCK ST BRDG ABOVE ITHACA STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 13 | 17 | 0.260 | 0.330 | 0.100 | 0.017 | 0.046 |
| 72/12/02 | 11 | 50 | 0.620 | 0.180 | 0.030 | 0.021 | 0.034 |
| 73/01/06 | 11 | 30 | 0.530 | 0.370 | 0.044 | 0.019 | 0.046 |
| 73/02/03 | 11 | 30 | 0.560 | 1.000 | 0.058 | 0.027 | 0.390 |
| 73/03/04 | 11 | 30 | 0.780 | 0.380 | 0.039 | 0.016 | 0.065 |
| 73/04/07 | 11 | 30 | 0.520 | 0.270 | 0.025 | 0.020 | 0.050 |
| 73/04/21 | 11 | 25 | 0.440 | 0.440 | 0.015 | 0.012 | 0.025 |
| 73/05/05 | 11 | 30 | 0.340 | 0.290 | 0.011 | 0.007 | 0.030 |
| 73/05/19 | 11 | 00 | 0.300 | 0.300 | 0.015 | 0.007 | 0.020 |
| 73/06/02 | 17 | 15 | 0.190 | 0.200 | 0.007 | 0.005K | 0.020 |
| 73/06/30 | 10 | 40 | 0.140 | 1.100 | 0.042 | 0.007 | 0.030 |
| 73/07/29 | 11 | 30 | 0.042 | 0.840 | 0.025 | 0.008 | 0.045 |
| 73/09/23 | 10 | 00 | 0.590 | 0.480 | 0.052 | 0.029 | 0.090 |
| 73/10/20 | 14 | 30 | 0.010K | 0.300 | 0.028 | 0.072 | 0.105 |

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608C1 LS3608C1
42 27 00.0 076 30 30.0
CASCADILLA CRK
36 7.5 ITHACA WEST
T/CAYUGA LAKE
HWY 13 BRDG NEAR LEHIGH VALLEY RR
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 13 | 44 | 0.710 | 0.350 | 0.024 | 0.048 | 0.130 |
| 72/12/02 | 12 | 10 | 0.860 | 1.150 | 0.046 | 0.034 | 0.076 |
| 73/01/06 | 13 | 15 | 0.840 | 0.180 | 0.009 | 0.044 | 0.094 |
| 73/02/03 | 13 | 15 | 1.000 | 2.310 | 0.042 | 0.036 | 0.150 |
| 73/03/04 | 13 | 15 | 1.160 | 0.940 | 0.069 | 0.032 | 0.155 |
| 73/04/07 | 13 | 15 | 0.670 | 0.260 | 0.037 | 0.019 | 0.045 |
| 73/04/21 | 13 | 15 | 0.176 | 0.300 | 0.010 | 0.017 | 0.065 |
| 73/05/05 | 13 | 15 | 0.250 | 0.380 | 0.005K | 0.035 | 0.060 |
| 73/05/19 | 11 | 25 | 0.290 | 1.200 | 0.042 | 0.031 | 0.065 |
| 73/06/02 | 17 | 45 | 0.220 | 0.380 | 0.019 | 0.060 | 0.115 |
| 73/06/30 | 11 | 00 | 0.380 | 0.400 | 0.037 | 0.123 | 0.220 |
| 73/07/29 | | | 0.230 | 0.500 | 0.029 | 0.189 | 0.290 |
| 73/09/23 | 11 | 00 | 0.710 | 0.940 | 0.072 | 0.094 | 0.420 |
| 73/10/20 | | | 0.198 | 1.050 | 0.260 | 0.029 | 0.120 |

A VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

360801 LS360801
42 28 00.0 076 30 05.0
FALL CREEK
36 7.5 ITHACA WEST
T/CAYUGA LAKE
HWY 13 BRDG
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 13 51 | | 0.620 | 0.500 | 0.032 | 0.010 | 0.044 |
| 73/01/06 | 13 40 | | 1.960 | 0.210 | 0.013 | 0.010 | 0.023 |
| 73/02/03 | 13 40 | | 0.920 | 0.620 | 0.054 | 0.021 | 0.240 |
| 73/03/04 | 13 40 | | 1.300 | 1.400 | 0.072 | 0.018 | 0.265 |
| 73/04/07 | 13 40 | | 1.300 | 1.230 | 0.028 | 0.011 | 0.030 |
| 73/04/21 | 13 35 | | 1.160 | 0.400 | 0.005K | 0.007 | 0.025 |
| 73/05/05 | 13 30 | | 0.880 | 0.790 | 0.012 | 0.006 | 0.020 |
| 73/05/19 | 11 45 | | 0.670 | 0.570 | 0.032 | 0.007 | 0.025 |
| 73/06/02 | 18 00 | | 0.830 | 0.320 | 0.014 | 0.007 | 0.025 |
| 73/06/30 | 11 00 | | 0.770 | 0.480 | 0.042 | 0.022 | 0.055 |
| 73/07/29 | | | 0.500 | 0.560 | 0.029 | 0.021 | 0.055 |
| 73/09/23 | 12 00 | | 0.450 | 0.600 | 0.034 | 0.030 | 0.075 |
| 73/10/20 | 14 00 | | 0.120 | 0.350 | 0.022 | 0.310 | 0.400 |

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

360BE1 LS360BE1
42 27 00.0 076 30 00.0
PLEASANT GROVE BROOK
36 7.5 ITHACA WEST
T/CAYUGA LAKE
HWY 13 BRDG
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 14 10 | | 0.460 | 0.660 | 0.260 | 0.021 | 0.147 |
| 72/12/02 | 13 45 | | 1.160 | 0.860 | 0.231 | 0.016 | 0.066 |
| 73/01/06 | 14 10 | | 1.640 | 0.620 | 0.120 | 0.015 | 0.054 |
| 73/02/03 | 14 10 | | 1.600 | 0.590 | 0.590 | 0.230 | 0.760 |
| 73/03/04 | 14 15 | | 1.300 | 0.760 | 0.180 | 0.014 | 0.065 |
| 73/04/07 | 14 10 | | 2.100 | 0.560 | 0.110 | 0.021 | 0.045 |
| 73/04/21 | 14 10 | | 1.600 | 0.480 | 0.042 | 0.014 | 0.040 |
| 73/05/05 | 14 00 | | 1.520 | 0.880 | 0.105 | 0.014 | 0.040 |
| 73/05/19 | 13 00 | | 0.138 | 0.440 | 0.120 | 0.012 | 0.035 |
| 73/06/02 | 19 15 | | 0.980 | 0.780 | 0.115 | 0.024 | 0.120 |
| 73/06/30 | 11 05 | | 0.390 | 1.100 | 0.360 | 0.050 | 0.155 |
| 73/07/29 | | | 0.230 | 1.050 | 0.273 | 0.098 | 0.220 |
| 73/09/22 | 10 45 | | 0.470 | 4.100 | 0.700 | 0.735 | 1.150 |
| 73/10/20 | 14 30 | | 0.320 | 0.350 | 0.005K | 0.013 | 0.025 |

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608F1 LS3608F1
42 33 00.0 076 36 00.0
TAUGHANNOCK CREEK
36 7.5 LUDLOVILLE
T/CAYUGA LAKE
TAUGHANNOCK BLVD BRDG
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 11 55 | | 0.460 | 0.280 | 0.021 | 0.005K | 0.008 |
| 72/12/02 | 10 25 | | 1.720 | 0.330 | 0.010 | 0.005K | 0.008 |
| 73/01/06 | 10 43 | | 1.620 | 0.130 | 0.005K | 0.006 | 0.016 |
| 73/02/03 | 10 40 | | 1.300 | 0.750 | 0.047 | 0.022 | 0.160 |
| 73/03/04 | 10 40 | | 1.300 | 0.800 | 0.046 | 0.010 | 0.210 |
| 73/04/07 | 10 40 | | 1.420 | 0.170 | 0.017 | 0.012 | 0.025 |
| 73/04/21 | 10 42 | | 1.000 | 0.220 | 0.005K | 0.005K | 0.005K |
| 73/05/05 | 10 40 | | 0.610 | 0.560 | 0.014 | 0.005K | 0.010 |
| 73/05/19 | 10 20 | | 0.500 | 0.380 | 0.019 | 0.005K | 0.005K |
| 73/06/02 | 16 45 | | 0.520 | 1.050 | 0.028 | 0.005K | 0.015 |
| 73/06/30 | 09 45 | | 0.420 | 0.440 | 0.022 | 0.008 | 0.020 |
| 73/07/29 | 10 40 | | 0.138 | 1.330 | 0.013 | 0.012 | 0.090 |
| 73/09/22 | 12 20 | | 0.060 | 0.100K | 0.013 | 0.005K | 0.010 |
| 73/10/20 | 11 30 | | 0.010K | 0.300 | 0.016 | 0.012 | 0.012 |

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608G1 LS3608G1
42 33 00.0 076 38 00.0
TRUMANSBURG CREEK
36 7.5 TRUMANSBURG
T/CAYUGA LAKE
ST HWY 89 BRDG BELO TRUMANSBURG STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 11 41 | | 0.930 | 0.520 | 0.090 | 0.189 | 0.231 |
| 72/12/02 | 10 20 | | 1.500 | 0.360 | 0.140 | 0.077 | 0.089 |
| 73/01/06 | 10 15 | | 1.800 | 0.120 | 0.076 | 0.110 | 0.131 |
| 73/02/03 | 10 20 | | 1.040 | 0.640 | 0.022 | 0.025 | 0.120 |
| 73/03/04 | 10 22 | | 1.160 | 0.710 | 0.030 | 0.023 | 0.135 |
| 73/04/07 | 10 20 | | 1.460 | 0.420 | 0.023 | 0.028 | 0.045 |
| 73/04/21 | 10 15 | | 1.520 | 0.660 | 0.126 | 0.123 | 0.135 |
| 73/05/05 | 10 20 | | 0.670 | 0.460 | 0.140 | 0.147 | 0.160 |
| 73/05/19 | 10 00 | | 0.280 | 0.210 | 0.009 | 0.091 | 0.105 |
| 73/06/02 | 16 30 | | 0.850 | 0.520 | 0.220 | 0.170 | 0.200 |
| 73/06/30 | 09 40 | | 0.650 | 0.390 | 0.052 | 0.110 | 0.135 |
| 73/07/29 | 10 20 | | 1.760 | 2.310 | 1.260 | 1.300 | 1.450 |
| 73/09/22 | 12 00 | | 4.500 | 2.500 | 1.795 | 1.200 | 1.300 |
| 73/10/20 | 11 00 | | 3.200 | 1.500 | 0.480 | 1.200 | 1.350 |

STORET RETRIEVAL DATE 74/11/26

360862 LS360862
42 32 30.0 076 41 00.0
TRUMANSBURG CREEK
36 7.5 TRUMANSBURG
T/CAYUGA LAKE
BRDG 1 MI W OF TRUMANSBURG ABOVE STP
11FPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 11 17 | | 0.720 | 0.330 | 0.023 | 0.006 | 0.015 |
| 72/12/02 | 10 00 | | 1.760 | 0.220 | 0.007 | 0.005K | 0.007 |
| 73/01/06 | 09 50 | | 1.960 | 0.170 | 0.040 | 0.005K | 0.009 |
| 73/02/03 | 09 50 | | 1.300 | 1.260 | 0.038 | 0.015 | 0.070 |
| 73/03/04 | 09 54 | | 1.320 | 0.990 | 0.079 | 0.010 | 0.065 |
| 73/04/07 | 09 50 | | 2.040 | 0.200 | 0.015 | 0.010 | 0.015 |
| 73/04/21 | 09 50 | | 1.800 | 0.100K | 0.005K | 0.006 | 0.006 |
| 73/05/05 | 09 50 | | 0.940 | 1.150 | 0.029 | 0.005K | 0.015 |
| 73/05/19 | 09 30 | | 0.300 | 0.240 | 0.007 | 0.005K | 0.005K |
| 73/06/02 | 16 45 | | 1.140 | 0.140 | 0.014 | 0.008 | 0.010 |
| 73/06/30 | 09 25 | | 0.510 | 0.580 | 0.016 | 0.011 | 0.040 |
| 73/07/29 | 09 50 | | 0.044 | 0.130 | 0.005K | 0.005K | 0.005K |
| 73/09/22 | 11 45 | | 0.044 | 0.370 | 0.038 | 0.010 | 0.020 |
| 73/10/20 | 10 30 | | 0.039 | 0.200 | 0.010 | 0.011 | 0.015 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608H1 LS3608H1
42 37 00.0 076 41 00.0
ROARDMAN CREEK
36 7.5 TRUMANSBURG
T/CAYUGA LAKE
BROG NW OF TRUMANSBURG ABOV STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 11 05 | | 0.234 | 0.310 | 0.021 | 0.005K | 0.008 |
| 72/12/02 | 09 55 | | 0.930 | 0.920 | 0.032 | 0.005K | 0.005K |
| 73/01/06 | 09 35 | | 0.970 | 0.360 | 0.023 | 0.005K | 0.008 |
| 73/02/03 | 09 30 | | 0.760 | 0.600 | 0.020 | 0.011 | 0.090 |
| 73/03/04 | 09 30 | | 0.920 | 0.640 | 0.016 | 0.007 | 0.080 |
| 73/04/07 | 09 30 | | 0.760 | 0.180 | 0.013 | 0.007 | 0.012 |
| 73/04/21 | 09 32 | | 0.560 | 0.215 | 0.006 | 0.005K | 0.005K |
| 73/05/05 | 09 30 | | 0.220 | 0.270 | 0.005K | 0.005K | 0.010 |
| 73/05/19 | 09 15 | | 0.590 | 0.360 | 0.013 | 0.005K | 0.005K |
| 73/06/02 | 16 00 | | 0.252 | 0.335 | 0.009 | 0.005K | 0.010 |
| 73/07/29 | 09 25 | | | 0.220 | 0.024 | | 0.010 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608J1 LS3608J1
42 37 30.0 076 42 00.0
UNNAMED STREAM
36 7.5 SHELDRAKE
T/CAYUGA LAKE
ST HWY 89 BRDG BELO INTERLAKEN STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 14 | 50 | 1.200 | 3.200 | 1.800 | 0.510 | 0.880 |
| 72/12/02 | 14 | 50 | 2.100 | 2.940 | 1.000 | 0.378 | 0.510 |
| 73/01/06 | 10 | 15 | 2.500 | 5.000 | 1.160 | 0.399 | 0.620 |
| 73/02/04 | 12 | 32 | 2.300 | 1.000 | 0.440 | 0.170 | 0.220 |
| 73/03/04 | 09 | 50 | 2.500 | 1.320 | 0.320 | 0.126 | 0.220 |
| 73/04/07 | 13 | 12 | 2.300 | 1.470 | 0.357 | 0.176 | 0.315 |
| 73/04/22 | 11 | 42 | 1.120 | 5.600 | 0.700 | 1.000 | 1.450 |
| 73/05/05 | 17 | 40 | 0.920 | 3.360 | 1.750 | 0.650 | 0.800 |
| 73/05/20 | 18 | 45 | 1.420 | 7.900 | 1.625 | 0.390 | 1.300 |
| 73/06/03 | 12 | 43 | 1.620 | 2.200 | 0.880 | 0.410 | 0.480 |
| 73/07/24 | 12 | 34 | 1.300 | 25.000 | 20.000 | | 3.700 |
| 73/08/19 | 12 | 13 | | 27.300 | 26.000 | 5.000 | 5.700 |
| 73/09/09 | 12 | 10 | 1.800 | 35.000 | 35.000 | 3.900 | 6.550 |
| 73/10/06 | | | 3.500 | 30.000 | 28.000 | 4.800 | 5.350 |

STORET RETRIEVAL DATE 74/11/26

360BK1 LS360BK1
42 37 00.0 076 43 30.0
UNNAMED CREEK
36 7.5 TRUMANSBURG
T/CAYUGA LAKE
ST HWY 96 BRDG ABOV INTERLAKEN STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 15 10 | | 1.430 | 0.440 | 0.083 | 0.024 | 0.035 |
| 72/12/02 | 15 00 | | 1.890 | 0.420 | 0.014 | 0.020 | 0.021 |
| 73/01/06 | 10 05 | | 2.100 | 0.310 | 0.018 | 0.010 | 0.015 |
| 73/02/04 | 12 00 | | 1.920 | 0.380 | 0.027 | 0.017 | 0.060 |
| 73/03/04 | 10 08 | | 2.000 | 0.540 | 0.034 | 0.020 | 0.050 |
| 73/04/07 | 12 38 | | 1.800 | 0.330 | 0.024 | 0.023 | 0.070 |
| 73/04/22 | 11 20 | | 1.680 | 0.140 | 0.009 | 0.013 | 0.025 |
| 73/05/05 | 19 30 | | 1.060 | 0.250 | 0.020 | 0.014 | 0.016 |
| 73/05/20 | 19 04 | | 0.910 | 0.800 | 0.027 | 0.017 | 0.095 |
| 73/06/03 | 11 55 | | 1.300 | 0.840 | 0.020 | 0.013 | 0.025 |
| 73/07/24 | 11 27 | | 2.500 | 0.680 | 0.019 | 0.017 | 0.020 |
| 73/08/19 | 13 02 | | | 0.250 | 0.089 | 0.026 | 0.035 |
| 73/09/09 | 11 28 | | 2.200 | 0.440 | 0.060 | 0.005K | 0.027 |
| 73/10/06 | | | 1.300 | 0.200 | 0.088 | 0.030 | 0.060 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608M1 LS3608M1
42 44 00.0 076 46 00.0
BIG HOLLOW CREEK
36 7.5 OVID
T/CAYUGA LAKE
ST HWY 89 BRDG N OF POPLAR SHORE
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/05 | 11 00 | | 1.040 | 0.500 | 0.088 | 0.009 | 0.022 |
| 72/12/02 | 15 15 | | 1.760 | 0.380 | 0.015 | 0.010 | 0.014 |
| 73/01/06 | 11 15 | | 1.740 | 0.270 | 0.014 | 0.009 | 0.015 |
| 73/02/04 | 13 21 | | 2.600 | 0.720 | 0.025 | 0.019 | 0.070 |
| 73/03/04 | 09 05 | | 2.600 | 0.950 | 0.063 | 0.024 | 0.095 |
| 73/04/07 | 13 58 | | 2.040 | 3.570 | 1.260 | 0.027 | 0.030 |
| 73/04/22 | 12 20 | | 1.760 | 2.300 | 0.044 | 0.005K | 0.005K |
| 73/05/05 | 19 55 | | | 0.910 | | | 0.015 |
| 73/05/20 | 18 30 | | 0.950 | 0.650 | 0.014 | 0.014 | 0.050 |
| 73/06/03 | 13 24 | | 1.060 | 0.580 | 0.024 | 0.005K | 0.005K |
| 73/07/29 | 13 23 | | 0.730 | 0.400 | 0.025 | 0.008 | 0.008 |
| 73/08/19 | 11 10 | | | 0.500 | 0.045 | 0.010 | 0.015 |
| 73/09/09 | 13 30 | | 1.520 | 0.245 | 0.038 | 0.005K | 0.005K |

K VALUE KNOWN TO BE LESS
THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608N1 LS3608N1
42 56 30.0 076 45 30.0
SENECA RIVER/SENECA/CAYUGA CANAL
36 7.5 SENECA FALLS
T/CAYUGA LAKE
ST HWY 89 BRDG NE OF SENECA FALLS
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 73/01/06 | 10 30 | | 0.430 | 0.775 | 0.154 | 0.012 | 0.044 |
| 73/02/04 | 09 45 | | 0.720 | 0.680 | 0.130 | 0.030 | 0.110 |
| 73/03/04 | 11 00 | | 0.750 | 0.970 | 0.480 | 0.019 | 0.090 |
| 73/04/19 | 16 45 | | 0.357 | 0.630 | 0.240 | 0.011 | 0.035 |
| 73/04/26 | 10 35 | | 0.315 | 0.880 | 0.154 | 0.010 | 0.035 |
| 73/05/17 | 10 00 | | 0.330 | 0.460 | 0.160 | 0.019 | 0.050 |
| 73/05/31 | 10 00 | | 0.330 | 0.520 | 0.120 | 0.018 | 0.045 |
| 73/07/31 | 11 30 | | 0.120 | 1.180 | 0.330 | 0.024 | 0.065 |
| 73/09/16 | 12 00 | | 0.105 | 1.600 | 0.390 | 0.028 | 0.055 |
| 73/10/13 | 11 05 | | 0.294 | 1.100 | 0.460 | 0.035 | 0.065 |

STORET RETRIEVAL DATE 74/11/26

3608N2 LS3608N2
42 58 00.0 076 44 30.0
SENECA RIVER/SENECA/CAYUGA CANAL
36 7.5 CAYUGA
T/CAYUGA LAKE
ST HWY 5 BRDG NEAR FREE BRIDGE CORNERS
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/05 | 16 | 15 | 0.460 | 0.700 | 0.220 | 0.008 | 0.044 |
| 73/01/06 | | | 1.040 | 0.785 | 0.090 | 0.037 | 0.092 |
| 73/02/04 | 16 | 15 | 0.730 | 0.390 | 0.100 | 0.016 | 0.050 |
| 73/03/04 | 11 | 30 | 1.060 | 0.920 | 0.250 | 0.032 | 0.110 |
| 73/04/19 | 16 | 35 | 0.540 | 2.300 | 0.126 | 0.008 | 0.040 |
| 73/04/26 | 10 | 30 | 0.430 | 0.860 | 0.105 | 0.006 | 0.035 |
| 73/05/13 | 09 | 50 | 0.510 | 0.480 | 0.042 | 0.006 | 0.030 |
| 73/05/17 | 13 | 30 | 0.500 | 0.430 | 0.040 | 0.007 | 0.030 |
| 73/05/31 | 09 | 30 | 0.510 | 0.750 | 0.033 | 0.007 | 0.030 |
| 73/07/31 | 12 | 00 | 0.072 | 0.780 | 0.150 | 0.006 | 0.035 |
| 73/08/16 | | | 0.056 | 1.200 | 0.210 | 0.012 | 0.040 |
| 73/09/23 | 12 | 15 | 0.530 | 0.840 | 0.160 | 0.044 | 0.100 |
| 73/10/13 | 11 | 00 | 0.120 | 0.800 | 0.189 | 0.008 | 0.030 |

STORET RETRIEVAL DATE 74/11/26

3608P1 LS3608P1
45 50 30.0 076 41 30.0
YA◆GER CREEK
36 7.5 UNION SPRING
T/CAYUGA LAKE
RR BRDG IN UNION SPRINGS BELO STP
11ERALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/05 | 11 | 25 | 0.540 | 0.450 | 0.091 | 0.017 | 0.042 |
| 72/12/03 | 11 | 10 | 1.520 | 0.100K | 0.030 | 0.032 | 0.105 |
| 73/01/06 | 11 | 30 | 2.300 | 0.350 | 0.015 | 0.013 | 0.029 |
| 73/02/04 | 12 | 30 | 2.000 | 0.260 | 0.066 | 0.046 | 0.100 |
| 73/03/04 | 12 | 15 | 2.200 | 1.460 | 0.240 | 0.031 | 0.210 |
| 73/04/19 | 16 | 00 | 0.770 | 1.550 | 0.060 | 0.005K | 0.030 |
| 73/04/26 | 11 | 30 | 0.700 | 1.490 | 0.030 | 0.005K | 0.040 |
| 73/05/13 | 15 | 00 | 1.220 | 1.300 | 0.240 | 0.019 | 0.085 |
| 73/05/17 | 15 | 00 | 1.220 | 0.710 | 0.220 | 0.005K | 0.015 |
| 73/05/31 | 15 | 00 | 1.240 | 1.150 | 0.210 | 0.009 | 0.055 |
| 73/07/31 | 12 | 00 | 0.010K | 0.840 | 0.037 | 0.011 | 0.030 |
| 73/09/23 | 10 | 00 | 0.190 | 1.260 | 0.890 | 0.029 | 0.065 |
| 73/09/23 | | | 0.019 | 1.150 | 0.160 | 0.006 | 0.020 |
| 73/10/13 | 11 | 30 | 0.400 | 0.260 | 0.032 | 0.005K | 0.005K |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

360BP2 LS360BP2
42 50 30.0 076 41 00.0
YAWGER CREEK
36 7.5 UNION SPRING
T/CAYUGA LAKE
GROVE ST BRDG IN UNION SPRINGS ABOV STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/05 | 08 30 | | 0.540 | 0.400 | 0.064 | 0.024 | 0.039 |
| 72/12/03 | 10 50 | | 1.200 | 0.820 | 0.094 | 0.092 | 0.135 |
| 73/01/06 | 11 00 | | 2.100 | 0.265 | 0.012 | 0.034 | 0.050 |
| 73/02/04 | 12 00 | | 2.400 | 0.100K | 0.040 | 0.038 | 0.050 |
| 73/03/04 | 12 05 | | 2.300 | 0.620 | 0.120 | 0.046 | 0.115 |
| 73/04/19 | 16 00 | | 0.760 | 0.980 | 0.044 | 0.011 | 0.020 |
| 73/04/26 | 11 30 | | 0.690 | 0.400 | 0.011 | 0.005K | 0.005K |
| 73/05/13 | 14 45 | | 0.170 | 1.600 | 0.034 | 0.005K | 0.015 |
| 73/05/17 | 14 45 | | 0.189 | 1.000 | 0.056 | 0.014 | 0.045 |
| 73/05/31 | 14 45 | | 0.170 | 0.750 | 0.015 | 0.009 | 0.035 |

K VALUE KNOWN TO BE LESS
THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

360801 LS360801
42 48 30.0 076 42 10.0
GREAT GULLY CREEK
36 7.5 UNION SPRING
T/CAYUGA LAKE
ST HWY 90 BRDG
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/05 | 10 40 | | 0.960 | 0.300 | 0.052 | 0.008 | 0.016 |
| 72/12/03 | 10 35 | | 1.960 | 0.120 | 0.005K | 0.008 | 0.008 |
| 73/01/06 | 10 40 | | 2.400 | 0.100K | 0.007 | 0.010 | 0.015 |
| 73/02/04 | 11 45 | | 2.500 | 0.170 | 0.046 | 0.040 | 0.080 |
| 73/03/04 | 12 00 | | 2.600 | 1.100 | 0.180 | 0.026 | 0.230 |
| 73/04/25 | 11 35 | | 1.500 | 0.340 | 0.022 | 0.005K | 0.005K |
| 73/05/13 | 14 25 | | 1.340 | 1.470 | 0.054 | 0.005K | 0.005K |
| 73/05/17 | 20 00 | | 1.320 | 0.740 | 0.014 | 0.005K | 0.010 |
| 73/05/31 | 14 00 | | 1.360 | 0.650 | 0.015 | 0.005K | 0.005K |
| 73/07/31 | 11 30 | | 1.380 | 0.360 | 0.018 | 0.005K | 0.015 |
| 73/08/16 | 14 00 | | 0.870 | 0.280 | 0.029 | 0.006 | 0.010 |
| 73/09/23 | | | 0.680 | 0.260 | 0.016 | 0.005K | 0.005K |
| 73/10/13 | 10 10 | | 0.300 | 0.200 | 0.024 | 0.005K | 0.005K |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608R1 LS3608R1
42 44 30.0 076 42 00.0
PAINES CREEK
36 7.5 SHELDRAKE
T/CAYUGA LAKE
ST HWY 90 BRDG S OF AURORA
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 10 | 15 | 3.200 | [illegible]32 | 0.030 | 0.066 | 0.081 |
| 72/12/03 | 10 | 20 | 3.000 | [illegible].00K | 0.014 | 0.035 | 0.055 |
| 73/01/06 | 10 | 00 | 3.000 | 0.182 | 0.005K | 0.028 | 0.034 |
| 73/02/04 | 11 | 00 | 3.000 | 0.100K | 0.027 | 0.034 | 0.040 |
| 73/03/04 | 11 | 45 | 3.500 | 1.000 | 0.068 | 0.038 | 0.170 |
| 73/04/19 | 16 | 25 | 2.100 | 2.100 | 0.089 | 0.064 | 0.075 |
| 73/05/13 | 13 | 30 | 2.000 | 0.570 | 0.058 | 0.018 | 0.035 |
| 73/05/17 | 13 | 35 | 2.000 | 2.200 | 0.056 | 0.013 | 0.020 |
| 73/05/31 | 13 | 30 | 2.000 | 0.170 | 0.016 | 0.016 | 0.025 |
| 73/07/31 | 11 | 32 | 0.550 | 0.720 | 0.015 | 0.005K | 0.010 |
| 73/08/16 | 11 | 30 | 0.610 | 0.460 | 0.040 | 0.028 | 0.042 |
| 73/09/23 | | | 4.100 | 2.200 | 1.260 | 1.580 | 1.600 |
| 73/10/13 | 10 | 30 | 12.000 | 1.400 | 0.455 | 3.100 | 3.200 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

360RS1 LS360RS1
42 32 30.0 076 32 30.0
SALMON CREEK
36 7.5 LUDLOVILLE
T/CAYUGA LAKE
TOMPKINS CO BWDG #159
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 14 | 10 | 1.630 | 0.330 | 0.020 | 0.006 | 0.023 |
| 72/12/02 | 14 | 15 | 1.260 | 0.100K | 0.009 | 0.009 | 0.013 |
| 73/01/06 | 14 | 30 | 2.600 | 0.100K | 0.006 | 0.010 | 0.017 |
| 73/02/03 | 14 | 30 | 2.100 | 0.600 | 0.066 | 0.030 | 0.230 |
| 73/03/04 | 14 | 30 | 2.500 | 1.470 | 0.081 | 0.025 | 0.280 |
| 73/04/07 | 14 | 30 | 2.700 | 0.810 | 0.021 | 0.019 | 0.035 |
| 73/04/21 | 14 | 30 | 2.060 | 0.170 | 0.006 | 0.005K | 0.010 |
| 73/05/05 | 14 | 30 | 1.520 | 0.240 | 0.013 | 0.005K | 0.015 |
| 73/05/19 | 13 | 35 | 0.294 | 0.200 | 0.009 | 0.005K | 0.010 |
| 73/06/02 | 15 | 00 | 1.820 | 0.140 | 0.006 | 0.005K | 0.020 |
| 73/06/30 | 11 | 30 | 1.400 | 0.265 | 0.013 | 0.006 | 0.015 |
| 73/07/28 | 14 | 25 | 0.590 | 0.330 | 0.015 | 0.005K | 0.015 |
| 73/09/23 | 10 | 30 | 0.380 | 0.210 | 0.023 | 0.005K | 0.010 |
| 73/10/20 | 18 | 00 | 0.294 | 0.250 | 0.008 | | 0.020 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608T1 LS3608T1
42 29 00.0 076 18 00.0
VIRGIL CREEK
36 7.5 DRYDEN
T/CAYUGA LAKE
ST HWY 13 BRDG ABOVE DRYDEN STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 11 25 | | 0.890 | 0.280 | 0.014 | 0.005K | 0.016 |
| 72/12/03 | 14 40 | | 1.620 | 0.420 | 0.072 | 0.029 | 0.051 |
| 73/01/06 | 15 00 | | 1.540 | 0.100K | 0.008 | 0.005K | 0.019 |
| 73/02/03 | 15 20 | | 1.060 | 0.660 | 0.038 | 0.012 | 0.080 |
| 73/03/04 | 15 25 | | 1.200 | 0.840 | 0.072 | 0.018 | 0.170 |
| 73/04/07 | 15 00 | | 1.140 | 0.180 | 0.013 | 0.011 | 0.020 |
| 73/04/21 | 15 05 | | 1.360 | 0.170 | 0.007 | 0.005K | 0.010 |
| 73/05/05 | 15 20 | | 0.910 | 0.260 | 0.006 | 0.005K | 0.010 |
| 73/05/19 | 14 45 | | 0.820 | 0.460 | 0.028 | 0.005K | 0.010 |
| 73/06/02 | 20 15 | | 0.900 | 0.820 | 0.014 | 0.005K | 0.015 |
| 73/06/30 | 12 00 | | 0.530 | 0.480 | 0.017 | 0.011 | 0.025 |
| 73/07/28 | 17 00 | | 0.690 | 0.330 | 0.021 | 0.005K | 0.020 |
| 73/09/23 | 13 30 | | 0.690 | 0.400 | 0.022 | 0.007 | 0.030 |
| 73/10/20 | 09 00 | | 0.620 | 0.550 | 0.005K | 0.007 | 0.010 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/26

3608T2 LS3608T2
43 00 00.0 076 20 00.0
VIRGIL CREEK
36 7.5 DRYDEN
T/CAYUGA LAKE
BRDG 1 MI NW OF DRYDEN BELO STP
11EPALES 2111204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P |
|---|---|---|---|---|---|---|---|
| 72/11/04 | 15 | 25 | 0.860 | 0.780 | 0.168 | 0.046 | 0.085 |
| 72/12/03 | 15 | 00 | 1.210 | 0.270 | 0.011 | 0.005K | 0.010 |
| 73/01/06 | 15 | 20 | 1.660 | 0.340 | 0.076 | 0.023 | 0.045 |
| 73/02/03 | 15 | 00 | 1.060 | 0.670 | 0.050 | 0.015 | 0.102 |
| 73/03/04 | 15 | 05 | 1.280 | 1.200 | 0.087 | 0.015 | 0.160 |
| 73/04/07 | 15 | 20 | 1.260 | 0.260 | 0.040 | 0.017 | 0.035 |
| 73/04/21 | 15 | 25 | 1.320 | 0.230 | 0.032 | 0.022 | 0.035 |
| 73/05/05 | 15 | 00 | 0.870 | 0.380 | 0.060 | 0.023 | 0.040 |
| 73/05/19 | 14 | 30 | 0.810 | 0.250 | 0.037 | 0.025 | 0.030 |
| 73/06/02 | 20 | 00 | 0.940 | 0.480 | 0.058 | 0.035 | 0.065 |
| 73/06/30 | 11 | 50 | 0.720 | 0.600 | 0.058 | 0.038 | 0.070 |
| 73/07/28 | 15 | 20 | 0.820 | 1.050 | 0.092 | 0.058 | 0.115 |
| 73/09/23 | 13 | 00 | 0.950 | 0.620 | 0.084 | 0.056 | 0.120 |
| 73/10/20 | 09 | 30 | 0.920 | 0.800 | 0.176 | 0.090 | 0.160 |

K VALUE KNOWN TO BE LESS THAN INDICATED

STORET RETRIEVAL DATE 74/11/27

360852 PW360852 P004500
42 28 00.0 076 30 00.0
CAYUGA HGTS VLG (ITHACA)
36089 7.5 ITHACA WEST
D/CAYUGA LAKE
CAYUGA LAKE
11EPALES 2141204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P | 50051 FLOW RATE INST MGD | 50053 CONDUIT FLOW-MGD MONTHLY |
|---|---|---|---|---|---|---|---|---|---|
| 73/01/04 | 09 00 | | | | | | | | |
| CP(T)- | | | 1.120 | 24.000 | 2.500 | 2.500 | 3.700 | 1.230 | |
| 73/01/04 | 15 00 | | | | | | | | |
| 73/02/21 | 09 00 | | | | | | | | |
| CP(T)- | | | 0.830 | 30.000 | 5.900 | 4.000 | 7.350 | 1.000 | 0.976 |
| 73/02/21 | 13 00 | | | | | | | | |

STORET RETRIEVAL DATE 74/11/27

360853 TF360853 P032000
42 26 30.0 076 31 00.0
ITHACA
36 7.5 ITHACA WEST
T/CAYUGA LAKE
CAYUGA INLET
11EPALES 2141204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P | 50051 FLOW RATE INST MGD | 50053 CONDUIT FLOW-MGD MONTHLY |
|---|---|---|---|---|---|---|---|---|---|
| 73/01/01 | 11 00 | | | | | | | | |
| CP(T)- 73/01/01 | 16 00 | | 6.000 | 7.300 | 0.076 | 1.400 | 2.700 | 5.780 | 7.620 |
| 73/02/01 | 11 00 | | 1.370 | 16.000 | 3.500 | 2.150 | 4.400 | 7.600 | 5.600 |
| 73/03/05 | 11 00 | | | | | | | | |
| CP(T)- 73/03/05 | 16 00 | | 1.050 | 18.300 | 5.300 | 2.000 | 3.600 | 5.600 | 5.600 |
| 73/04/16 | 11 00 | | 0.890 | 20.400 | 4.550 | 2.800 | 4.600 | 7.700 | 5.500 |
| 73/05/02 | 11 00 | | 2.300 | 16.000 | 0.750 | 2.200 | 3.300 | 6.400 | 5.900 |
| 73/06/19 | 11 15 | | | | | | | | |
| CP(T)- 73/06/19 | 16 00 | | 3.000 | 8.820 | 0.148 | 1.340 | 2.100 | 6.030 | 5.400 |
| 73/07/05 | 11 00 | | | | | | | | |
| CP(T)- 73/07/05 | 16 00 | | 3.000 | 10.000 | 0.470 | 1.600 | 2.700 | 5.240 | 4.800 |
| 73/08/07 | 11 00 | | | | | | | | |
| CP(T)- 73/08/07 | 16 00 | | 0.720 | 13.600 | 0.400 | 0.720 | 2.400 | 4.530 | 4.500 |
| 73/09/05 | 11 00 | | | | | | | | |
| CP(T)- 73/09/05 | 16 00 | | 2.220 | 14.000 | 1.820 | 1.600 | 3.300 | 6.230 | 5.800 |
| 73/10/04 | 11 00 | | | | | | | | |
| CP(T)- 73/10/04 | 16 00 | | 1.261 | 21.000 | 7.300 | 2.600 | 3.800 | 6.100 | 5.700 |
| 73/11/08 | 11 00 | | | | | | | | |
| CP(T)- 73/11/08 | 16 00 | | 0.600 | 14.500 | 3.400 | 0.690 | 1.650 | 5.400 | 5.300 |
| 73/12/05 | 11 00 | | | | | | | | |
| CP(T)- 73/12/05 | 16 00 | | 2.730 | 20.100 | 4.500 | 2.200 | 4.400 | 6.620 | 5.800 |
| 74/01/08 | 11 00 | | | | | | | | |
| CP(T)- 74/01/08 | 16 00 | | 2.400 | 9.800 | 0.093 | 1.240 | 2.300 | 4.390 | 5.100 |

STORET RETRIEVAL DATE 74/11/27

360855 TF360855 P000800
42 37 30.0 076 43 00.0
INTERLAKEN VLG
36 7.5 TRUMANSBURG
T/CAYUGA LAKE
UNNAMED CREEK
11EPALES 2141204
4 0000 FEET DEPTH

| DATE FROM TO | TIME OF DAY | DEPTH FEET | 00630 NO2&NO3 N-TOTAL MG/L | 00625 TOT KJEL N MG/L | 00610 NH3-N TOTAL MG/L | 00671 PHOS-DIS ORTHO MG/L P | 00665 PHOS-TOT MG/L P | 50051 FLOW RATE INST MGD | 50053 CONDUIT FLOW-MGD MONTHLY | |
|---|---|---|---|---|---|---|---|---|---|---|
| 72/12/22 | 11 00 | | 1.220 | 22.000 | 1.400 | 2.415 | 3.350 | 0.199 | 0.218 | |
| 73/01/22 | 10 30 | | | | | | | 0.179 | 0.210 | |
| 73/02/23 | 08 00 | | 0.720 | 130.000 | 10.500 | 4.000 | 17.600 | 0.137 | 0.165 | |
| 73/03/23 | 10 30 | | 0.880 | 38.000 | 4.900 | 4.500 | 6.100 | 0.264 | 0.190 | |
| 73/04/23 | 10 30 | | 0.013 | 34.000 | 18.200 | 6.400 | 7.700 | 0.218 | 0.280 | |
| 73/06/01 | 08 30 | | 0.499 | 34.000 | 7.570 | 3.380 | 5.300 | 0.325 | 0.195 | |
| 73/06/22 | 11 00 | | 0.072 | 66.000 | 28.000 | 4.600 | 7.450 | 0.261 | 0.215 | |
| 73/07/20 | 08 30 | | 0.094 | 80.000 | 29.000 | 7.350 | 10.000 | 0.169 | 0.144 | |
| 73/08/27 | 08 00 | | | | | 7.000 | 10.500 | 0.103 | 0.110 | |
| 73/09/24 | 08 00 | | 0.280 | 43.000 | 40.000 | 3.200 | 12.000 | 0.094 | 0.118 | |
| 73/10/19 | 09 00 | | 0.110 | 66.000 | 39.000 | 8.000 | 10.000 | 0.090 | 0.085 | |
| 73/11/23 | 10 00 | | 0.260 | 53.000 | 37.000 | 4.900 | 8.000 | 0.520 | 0.690 | |
| 73/12/21 | 08 30 | | 1.680 | 12.500 | 0.210 | 1.600 | 2.800 | 0.217 | 0.102 | |